



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY,  
(INCORPORATED.)

Vol. XIV.

CHICAGO, ILLINOIS, JUNE 15, 1896.

No. 12

ONE DOLLAR PER ANNUM.  
SINGLE COPY, TEN CENTS.

### THE C. H. & D. R. R. ELEVATOR "B" AT TOLEDO, OHIO.

The new C. H. & D. R. R. elevator recently completed at Toledo, Ohio, with its engine and boiler house, stack and coal shed adjacent thereto, together with foundations for all, and all the machinery and millwright work contained therein necessary to place the entire structure in complete and satisfactory operating condition, is doubtless one of the most substantial and complete plants of the kind erected in this country.

The elevator is a plank and frame structure with a brick engine and boiler room and stack. The entire elevator plant is thoroughly and substantially framed and erected, only the best material being used throughout. It is claimed that the whole plant is equal in power, capacity, material and workmanship to the best plant of similar class and capacity now erected. The main building is 90 by 264 feet, and has 165 storage bins, 65 feet in depth, with an aggregate net capacity of 1,000,000 bushels. The engine and boiler house, 38 feet 6 inches by 68 feet 6 inches, is divided into engine and boiler room with a brick partition between. The stack is 12 feet 6 inches square at the base, and 159 feet 6 inches high, this being one foot above the highest point of the main building.

The grain business transacted in and through the elevator is to unload and load cars, also to load and unload boats. Arrangements have been made and appliances been provided for cleaning and caring for grain in the most approved manner. The elevator contains 12 elevator legs, of which six are receiving elevators designed for unloading cars, and six shipping elevators for loading. Each of these legs is capable of elevating at least 8,000 bushels of grain per hour.

Each elevator leg is equipped with drop signals between the first floor and the weighing floor in the cupola; these signals are of approved construction and designed to give the very best service.

There is also a dock elevator constructed and in-

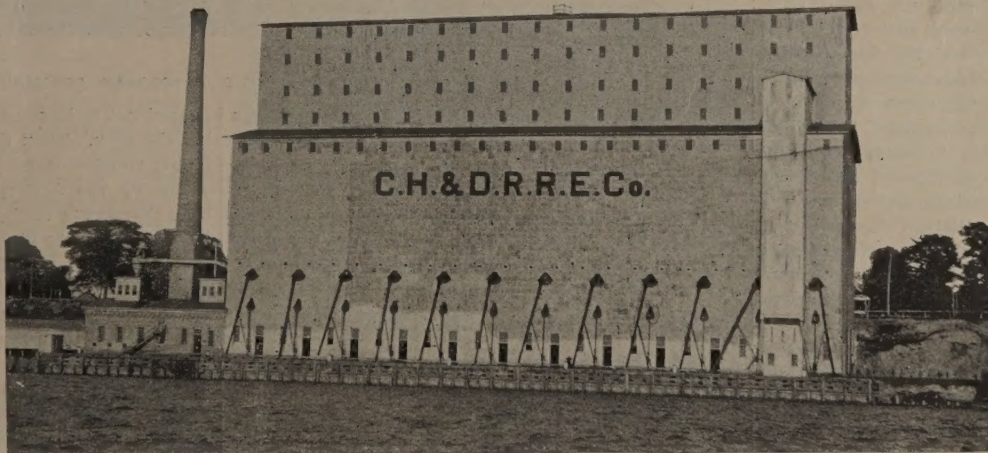
closed in a tower in the south end of building on the river side, which is capable of elevating from boats at the rate of 8,000 bushels per hour. In the first story of the elevator is an office for the use of the elevator foreman, and in the scale floor story of the cupola there is a similar office constructed for the use of the weighman. Each of these offices is heated by steam radiators.

The exterior wall surfaces of the main building are covered with No. 24 galvanized corrugated iron. The roof surfaces are covered with I. X. charcoal tin. Before applying the tin covering, tarred felt paper was laid and nailed down on all roof surfaces. At each end of the elevator extending 10 feet above

bottom of each spout, and four inches up each side. The revolvers under the scale hoppers are carried on independent timbers, having no connection between these spouts and the hoppers. The spouting between the scale hoppers and the bin story are made of iron on what is known as "trolley spout system," the diameter of the upper section being 12 inches, and the lower section large enough to telescope freely over the upper. The lower end of outside sleeve is carried on suitable cast-iron truck, carried on swivel castor wheels. The movement of this truck is perfectly free in all directions and capable of being handled easily by one man; each spout is made to connect with every bin within its greatest diameter

of movement, circular openings having been cut through the floor as near the center of each bin as is practicable and each opening covered with a trap door, laid in flush with top of floor. From each scale are built direct shipping spouts of wood to the shipping bins; these direct spouts connect to revolver under scales and deliver to the shipping bins through the shortest possible distance.

The lower floor spouting from bottom of bins, is an innovation in elevator spouting, being arranged with an inter-



THE C. H. & D. R. R. ELEVATOR "B" AT TOLEDO, OHIO.

the track level to midway of upper window in cupola, also on the east side of the elevator from the center windows of cleaning room to within 10 feet of track level, there are fire-escape ladders formed of iron stirrups, each three-quarter inch in diameter and 18 inches long, projecting 6 inches from building.

Located in the scale floor story of cupola are twelve hopper scales of 1,200 bushels' capacity each. Immediately over each scale in garner floor is a garner having a capacity of 1,500 bushels for receiving grain while scale hoppers are being emptied. The garners have an 18-inch opening at the bottom, through which 1,200 bushels of grain can be dropped into the scale hoppers in two minutes, thus allowing the elevators to carry up grain continuously without any interruption on account of weighing.

All fixed spouts are manufactured of No. 1 white pine and lined with No. 16 black iron across the

mediate revolver, having spout connection with several bins, thus making it convenient to run grain from the several bins to the elevators by simply putting up a short portable spout, and avoiding the trouble and expense incident to hanging up long portable spouts to each and every bin.

For the purpose of loading grain into cars automatic car loaders have been provided of the most approved pattern, which are capable of loading 1,200 bushels of grain without trimming. Located under the shipping bins on the dock side, are 12 shipping spouts for loading boats. These spouts are hung from large cast-iron revolvers, built in and secured to the crib work under the shipping bins; each spout is constructed with 12-inch well tube in one piece, having a 13-inch well tube in one piece sliding on the outside, and each is handled by means of a special hoisting apparatus by which the spout may be controlled and placed in position on the ship on the dock. In the



cleaning room provided in the northeast corner of the building, with bins above and below, are four elevator separators of an approved pattern and make, with a maximum capacity of 2,500 bushels per hour each, provided with spouts and driving connections complete. Each machine is connected to one No. 8 Cyclone Dust Collector by means of suitable spouting, and the collectors have three outlets or air dischargers carried out of the side of the building.

A complete system of pneumatic sweepers set up throughout the house, having three ducts on each floor, are connected with one main trunk spout running from Cyclone Dust Collectors in the cleaning room, having two sweeper heads located in same for the cleaner floor. The whole system of pneumatic sweepers is operated by a separate pressure blower of ample capacity, located on the first floor and driven from the line shaft. This pneumatic system includes a separate Cyclone No. 8, located on top of the boiler room and connected to each furnace by a feeder spout.

A ticket elevator between the first floor and weighing floor of cupola is built in a specially constructed passageway, having a pair of gong bells of the trip gong pattern, 8 inches in diameter, located on the ticket elevator case, so as to be operated from either top or bottom. A 12-inch trip gong is located in the engine room for the purpose of signaling the engineer. The engine for the main power plant is a Hamilton-Corliss, direct acting, condensing type, developing 50 horse power at 60 revolutions, with mean effective pressure of forty pounds to the square inch. The valve mechanism and general arrangement of the engine is complete in every detail, having a main shaft extending into the elevator building. The weight sufficient for the flywheel of this engine is incorporated in the main driving sheave, which is 16 feet in diameter, having 16 grooves turned in its face, designed for rope transmission. Three first-class standard make of return tubular boilers, 66 inches in diameter and 16 feet long, having tubes four inches in diameter, generate the steam necessary to run the entire plant.

Fire protection is afforded by a duplex fire pump of standard make, 20x10x16 inches, with a complete system of standpipes, hose reels and hose connections distributed over the building. These hose valves are so distributed that every part of the interior of the building may be thoroughly drenched by one or more plugs, using a 50-foot section of hose. Water can be had both from the river, with which fire pump is connected, and the city main, which has a connection with standpipes in elevator. Two dozen fire extinguishers are distributed about the building in suitable locations for immediate use. A full equipment of 9 American District Alarm Boxes are distributed over the building, from each of which a watchman is required to send in a report every hour from 6 p. m. until 6 a. m., making 13 reports each night. Fifty water barrels filled with water, with two galvanized fire buckets hanging over each barrel, are distributed on the floors of building, thus making the protection against fire up to standard efficiency.

The electric light plant is driven by a separate automatic high speed engine of approved make, located on a foundation provided in the engine room. This engine is connected by means of a rawhide rope drive direct to dynamo of 250 16-candle incandescent light capacity, 110 volts. Distributed over the building are 261 incandescent lights. On the outside are 6 arc lights, 4 of which are located on dock side, and one at each end of building.

All main transmissions of power to the different parts of the elevator are made of manila rope transmission. A passenger elevator with plain finished car about 6x5 feet, is located in vacant bin space in south end of the building. This passenger elevator runs between the first floor of the elevator and the top floor of the cupola at a speed of 75 feet per minute, and has an easy working capacity of 1,000 pounds. It is provided with all necessary safety attachments, counter weights, heavy wire screen over car, and swing gates at each floor in cupola.

This elevator was built on exceptionally carefully planned foundations, which were put in under very

adverse circumstances, the Maumee River inundating the foundations and breaking the dams erected around the same repeatedly during the construction. The contractors went to great trouble in securing the best and largest piling in the market, and that at a time when the oil excitement occupied the time and attention of nearly all the pile furnishers and the teamsters in the surrounding counties where the piling had been contracted for. Nevertheless the elevator was erected on top of its foundations in less than 4 months, barring some of the corrugated iron covering, which was finished shortly afterward. The contractors for the elevator, wharf and dock were The Heidenreich Company, elevator builders, Rookery Building, Chicago.

### GRAIN HANDLING PLANT AT COLOGNE, GERMANY.

We give herewith an illustration of an ornate structure at Cologne, Germany, which some of our readers may think was built for a temple, but they are mistaken. It was built for just what it is used for, a grain storage and handling plant. The principal part shown is the towers and the conveyor gallery. The marine leg is at work unloading a scow on the Rhine River. The plant is the property of the Cologne Grain Storage Company, and was erected



GRAIN HANDLING PLANT AT COLOGNE, GERMANY.

by G. Luther. The marine leg is driven by a gas engine. The grain warehouse is 270 feet from the quay. It has 40 bins with an aggregate capacity of 3,500 tons. The elevating capacity is 40 tons an hour. Warehouses where grain is stored on the floor are attached. These houses have room for 2,500 tons, making the total storage capacity 6,000 tons.

### CRIBBING CORN IN THE SHUCK.

The Keytesville, Mo., Signal says: "C. A. Chapman is now shelling and shipping the large amount of corn he cribbed up last fall. The corn is damp and in very bad condition. It was cribbed in the shuck and seems to have been poorly covered. Corn that is put up in the shuck while dry, and kept dry under good shelter will keep well. But if wet will continue to get worse as soon as warm weather sets in. It was always, to us, amazing short-sightedness, why the trade will consent to buy corn in the shuck at any price. It possesses no advantages we could ever discover to the purchaser and gives the seller every advantage to overreach him."

It is claimed that the shucks protect the corn from weevil and other insects.

The grain elevators at Philadelphia have reduced their charges for elevating and storing oats for 20 days or less to 1 cent per bushel, to meet the charges made at Boston.

According to the reports received, the chinch bugs, army worms, Hessian flies and other pests have been devouring the wheat during the past month. The human family, evidently, will have to dine at the second table and accept what is left.—Trade Bulletin, Chicago.

### TAXING CRIBBED CORN IN IOWA.

The question of taxability of corn in the crib held by speculators has been brought up in Iowa by the case of Philip Armour against the town of Churdan. The matter is being discussed in that part of the state by assessors and town boards generally. Along the line of the Des Moines, Northern & Western Railway Armour has hundreds of thousands of bushels of corn that has thus far escaped assessment. Late in the fall he put a man in nearly every town, but made no particular effort, so it is said, to get in the corn until after the first of the year, in order to escape assessment in case there was an inclination to do so. As far as learned the Churdan assessor was the only official who actually made a return on corn.

The local agent was notified of the action of the assessor, and when the board of equalization that meets once a year to listen to grievances and equalize assessments met, the local representative of Mr. Armour was present and protested against the action of the assessor, and asked the board to give relief by striking out the amount the corn had been assessed, declaring the listing of the corn by the assessor was illegal and not according to usage.

The board asked for the opinion of an attorney in this city and was informed that the assessor ap-

peared not to have exceeded his authority in assessing the corn. Then the board appealed to State Attorney General Remley, and he supported the opinion given by the Jefferson lawyer. Mr. Armour will take the matter to the district court, as the Churdan board refused to give him any relief in the matter, and the decision will form a precedent. The outcome of the case will be watched with unusual interest by warehousemen.

It is stated that the position taken by Armour's attorneys will be that the corn was in transit, and hence was not assessable, but the defense can prove that the corn has been stored in warehouses along the line for nearly six months, simply awaiting a favorable condition in the market, and up to the present time that condition has never existed, and so the corn remains. Lawyers all appear to be of one opinion, and that is that Armour will surely be beaten in the District Court.

### REDUCED CHARGES ON OATS AT BALTIMORE.

According to the Baltimore News the elevators of that city have reduced their charges and in the future instead of charging 1¼ cents a bushel for the first 10 days, and ¼ cent additional for each succeeding 10 days for the storage of oats and loading them on vessels, only 1 cent a bushel for the first 20 days, and ¼ cent for each succeeding 10 days will be charged. This applies only to oats for export. It is expected that the new schedule of charges will stimulate the export of oats from all Atlantic ports.

Some of the Chicago bears claim that the bugs cannot hurt Kansas wheat because it is 2 Hard.



### FEEDING OIL MEAL.

Twenty years ago there was very little oil meal used on the farms of this country, says the National Stockman. A few advanced feeders and breeders of livestock had learned its value in finishing animals for the block or for the show ring, and it was used in a limited way by dairymen, but the bulk of the product of our oil mills was exported, British farmers taking large quantities of it. The general advancement in knowledge of feeding during recent years has brought about a wonderful change.

Feeding oil meal is now almost as common as feeding bran, and those whose grain feed is of necessity principally corn have found it almost indispensable in providing a properly balanced ration. Manurial value is another point in its favor, especially in the Eastern states. Prices this year have been about the lowest on record, in sympathy with other feed-stuffs, and there has been a very large consumption. It is safe to say that the experience of this year will cause much more to be used hereafter, but the increase would be greater if none but the old process meal had been used. We have heard several complaints from those who have been using the new process meal—which is decidedly inferior—principally on account of the chemicals used in extracting the oil.

### CLEAN BILLS OF LADING FOR GRAIN.

The law concerning the use of track scales on grain shipments in the state of Kansas has been declared inoperative and the movement toward a clean bill of lading is temporarily checked in that state. On some accounts this is a fortunate outcome of the attempt to improve the conditions attaching to the shipment of grain. That a shipper is entitled to a clean receipt for whatever property he delivers to a railroad company is undeniable, but in the matter of bulk grain the difficulties attaching to the question are many and not easy of solution. It is not enough that the exact amount of grain loaded in a car be known at the shipping point. The outturn at destination must also be a determinable quantity, and in order to do this it is probable that some modifications of the present methods of handling grain, both at the shipping and delivery points, will be necessary. Promiscuous delivery at the option of the shipper will certainly have to be abandoned, for no railroad company can ascertain actual weights on delivery unless it can absolutely control same. Fortunately American ingenuity is making at least one part of the problem solvable. Automatic scales of absolute reliability both as to weight and record can now be obtained and the degree of perfection to which this matter has been carried is attested by one which has been in use in Chicago four years and which has weighed during that time over ten million bushels without a mistake in either quantity or record. The placing of scales of this character in the weighing room of country elevators, in charge of the agent of the railroad, under lock and key, would afford a means of absolutely determining the amount loaded into the car. Possibly a similar arrangement at delivery points in charge of official weighmasters or inspectors would give a corresponding service. Some different arrangement would of course be necessary for the handling of track grain, perhaps to the extent of exempting such shipments from the issue of clean bills of lading. It is obvious that any successful movement in this direction can only be accomplished through the united efforts of those most interested in the matter, and possibly the surest and quickest way to reach this end is for the shippers to equip their elevators with automatic weighing machines so arranged as to be absolutely under the control of the station agent, and then refuse to accept anything except a clean bill of lading on shipments. Should such a course be deemed desirable it should be done by the united action of the grain shippers after conference with the railroads; and in any event ample notice should be given to permit of adequate facilities for determining outturn weights being established at the various terminals by the carriers. That some such arrangement will ultimately

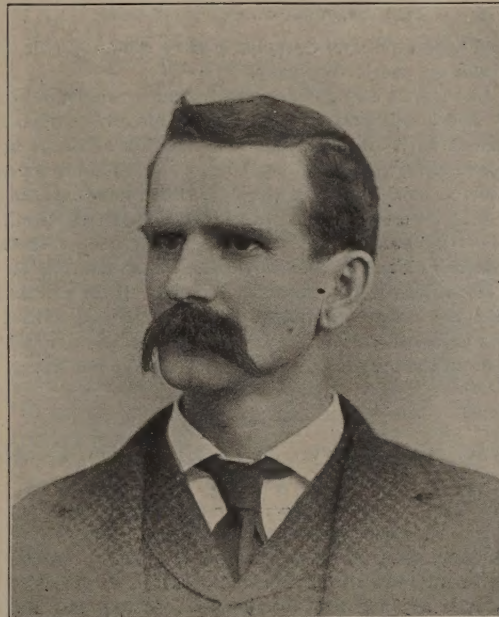
be adopted is beyond doubt, but how soon it shall be established is a matter which rests largely with the shippers themselves.—*Railway Review*.

Our contemporary quoted in the foregoing is inclined to be very fair in this matter, but forgets that many country elevator men have already provided scales of various kinds, yet are unable to get a clean bill of lading. As they also provide warehouses for storing and facilities for loading their own grain, it would be a little too much to insist upon their providing a special kind of scale for the exclusive use of the local freight agent. The *Review's* suggestion on this point shows that its editor must have spent some time recently in hugging that rank old heresy which is so dear to all traffic managers, to the effect that "all grain shippers are dishonest; railroad agents alone are honest."

The clean bill of lading must be adopted. It has fairness and justice on its side and carriers can advance no good reason for not giving a clean bill of lading.

### PRESIDENT R. R. PALMER.

The grain trade of Iowa seems to be in good condition for the organization of grain dealers' associa-



PRESIDENT R. R. PALMER.

tions, as during recent months two new associations have been organized. Prompted by the success of the Grain Shippers' Association of Northwestern Iowa, the dealers of Central Iowa organized an association, and a short time ago the dealers of Southwestern Iowa joined with those of Northwestern Missouri, and formed another association, which is known as the Grain Dealers' Association of Southwestern Iowa and Northwestern Missouri. (This new association started with the following officers: President, R. R. Palmer, Creston; vice-president, E. H. Vanschioack, Griswold; treasurer, J. B. Samuels, Riverton, and secretary, G. A. Stibbens of Coburg. The association started with a number of prominent firms as supporters and has been gaining new members rapidly so that its meeting at Council Bluffs, Tuesday, June 16, is sure to be well attended.

The President of this association, Robert R. Palmer, was born at Milford, Pa., in 1852. He was educated in a country school, and afterward was connected with a tannery and lumber business in Pennsylvania. At the age of 27 he went to Burlington, Iowa, and engaged with the grain firm of V. W. Bullack & Co. Seven years later he engaged in the grain business for himself at Creston, Iowa, and has been there for the last ten years. He operates a steam power cleaning elevator at Creston, and has warehouses at several near-by stations. Mr. Palmer has been very successful in the grain business, and has a reputation for conducting his business according to upright, honorable methods. He does not

yield to the dealers' ever active temptation to speculate, which no doubt accounts for his success.

The association of which Mr. Palmer is the president merits the hearty support of every dealer of the district it covers, and if the dealers will join and help along the work they will soon be so pleased with the results of combined effort for reform that they will soundly kick themselves for not having done so before.

### FREIGHTS AND COST OF PRODUCTION.

The farmer in Iowa who is shipping his corn into Chicago is netting about 16 cents per bushel. The railroad which hauls it is getting 11 2-10 cents a bushel. That apparently inequitable division of the results of farming is already creating a good deal of talk, and may create more. It will only need a 5-cent further decline in corn to make the freight from Iowa on corn the same as the price to the farmer. Everybody feels that that will mean more granger legislation in the West, which is the reason why stock speculators are getting so interested in the low prices of farm products. The Iowa farmer is getting for his oats about 12 cents a bushel, and the railroad is getting 6 cents for hauling them. The Nebraska and Kansas farmers are not doing as well as the Iowa farmers. They are getting about 14½ cents for their corn, while the railroads are getting 14 cents for hauling it to Chicago. They charge a little over 10 cents for the oats, and from the western parts of those states the roads are charging 7½ cents per bushel for bringing the oats to market. At present prices the freight is a killing charge on any kind of grain.—*Chicago-Times Herald*.

The *Times-Herald* seems to forget that the rate makers must necessarily consider the cost of transporting grain first. The cost of production of a commodity which constitutes so large an item of freight receives secondary consideration only.

### UNJUST DISCRIMINATION AGAINST TOLEDO.

A Toledo receiver sent us a clipping from the *Bee* of that city last month, but too late for publication in our May number. It is as follows:

"The grain buyers and shippers of Toledo are on their ear over alleged discrimination on the part of certain railroads. The petition requesting the Clover Leaf and Wabash railroads to grant all—with an emphasis on the all—Toledo grain dealers and shippers what is known as the rebilling or through billing system. All the principal grain points have this privilege and Toledo seeks nothing but her rights. Detroit, for instance, can bill a car of wheat from Kansas City to Detroit and then to Buffalo or some other Eastern points by simply rebilling. Toledo, however, is obliged to pay the freight here, and then reship, paying local rates from Toledo East. In this instance Detroit is favored with a through or cheaper rate to final point of destination and the consignee would not be required to advance freight charges from Kansas City to Detroit. On the other hand, Toledo in shipping a car of wheat from, say, Kansas City, before being permitted to rebill to some Eastern point, is required to surrender bill of lading and pay the freight charges from Kansas City to Toledo."

If something has occurred to thoroughly arouse the shippers and receivers of that city to united action, it may prove a good thing. It should prompt them to organize a permanent association for the special purpose of advancing the common interests of the city's grain dealers. Surely an active organization could find plenty to do.

The Missouri Railroad and Warehouse Commissioners have decreed, by amendments to the state rules of inspection which will go into effect July 1, that no mixing of different kinds of grain will be allowed in No. 2 Red Winter Wheat, No. 2 Hard Winter Wheat and No. 2 Spring Wheat. They will endeavor to make pure wheat of standard weight the rule.



## THE CONSTRUCTION OF GRANARIES.

No. V.

BY F. STALLMAIER.

Without regard to the materials used, the construction of a lofty ground floor should be avoided, if possible, as the cost of the foundation is very high. The most practical method is to bring the bins down as low as possible, and shorten one or two bins where passages across the building are required. In Figs. 19 and 20 such a silo arrangement is shown, the bins going down so far as to leave only space for a belt conveyor, and only two bins, A and B, are shortened to give room for the crossing staircases. The whole foundation in this case is constructed of wood, and the sides arranged so as to discharge toward the middle of the building, viz., to the belt conveyors. Small silos, with about four bins only, constructed of wood, requiring no foundation whatever, being in most cases in an out-of-the-way locality, must be cheaply built. The strong and solid construction of the bins permits them being placed on the sand. Such a framework elevator, as it may be termed, is illustrated in Figs. 21 and 22. Four bins are erected around an elevator, which carries the grain to the top of the tower in which the weighing and cleaning machinery and driving gear are placed. The grain is brought to the elevator sink by wagons. Each of the bins is discharged by opening a slide, which directs the grain to the elevator boot, when by means of the elevator buckets it is elevated to the top, dropped into the scale hopper and discharged into cars by a suitably-arranged spout. The machinery is in this case driven by horse power.

Another example of a cheap and simple construction is shown by Figs. 23 and 24. The whole building is of wood, and only the middle bins above the belt conveyor are provided with inclined bottoms. The bins are arranged on both sides of the conveyor, and are of different sizes, as also are the ground

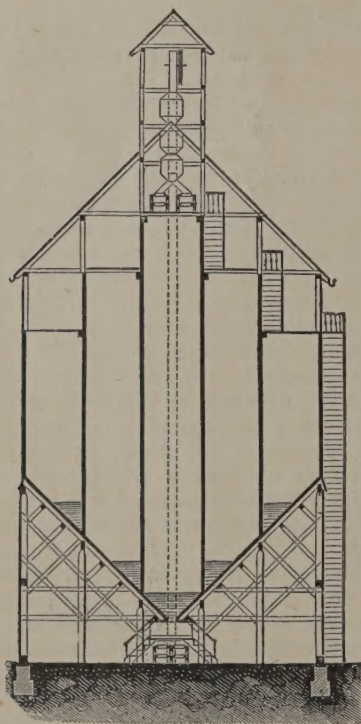


Fig. 19.

THE CONSTRUCTION OF GRANARIES.

floor bottoms of them. The bins empty automatically till the grain has come to its falling angle, when the rest has to be shoveled to the conveyor.

When erecting a new elevator, its arrangement has to be well considered. As before stated, the square has, of all rectangles by equal circumference, the greatest area; therefore it would seem well to adopt the square form of building in regard to the consumption of material; but as the mechanical appliances for receiving and discharging the grain can be more conveniently placed in a building having its extent in only one direction, it will for that reason be preferable to adopt the rectangle shape.

It is impossible to give a general rule when to

adopt the square or rectangle. It is best to leave the decision entirely in the hands of the architect. By building on a limited space on a quay, it would not be economical to erect the elevator close to the water's edge, as the grain vessels can only come alongside at certain points, and consequently only part of the quay would be used. The erection of warehouses behind elevators should be avoided, as the transport of the goods on the quay is difficult

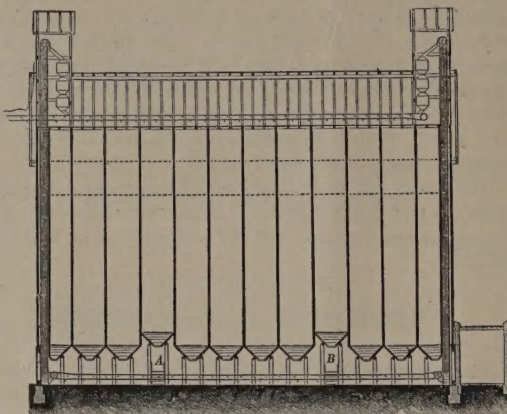


Fig. 20.

THE CONSTRUCTION OF GRANARIES.

and time-wasting. Carrying grain a distance over or under ground is very easy.

In Figs. 25 and 26 is illustrated an arrangement of a warehouse and elevator which may be called a model, as it allows complete utilization of the quay for loading any kind of goods. The warehouses are erected close to the waterside. Between them and the water's edge are tracks for cars and transportable steam cranes. For unloading grain laden vessels, floating elevators are provided. These floating elevators deliver the grain to conveyor belts running into the elevator building. For loading and unloading cars two tracks are laid inside the elevator, and behind the building are three more for switching.

[TO BE CONTINUED.]

## PROHIBITING GRAIN SPECULATION.

The German agrarians have succeeded apparently in persuading the government to prohibit speculation in breadstuffs on the Berlin Boerse. The provisions of the act are not specifically reported, but it is understood that the intent is to put a stop not merely to betting in the purchase and sale of "privileges," but also the buying and selling of flour and grain for future delivery and that this is to be done in the supposed interest of German grain growers.

A majority of these persons entertain the idea that buying and selling for future delivery tend to depress prices lower than they otherwise would be and that the enforcement of the measure will enable them to obtain higher figures for the grain they have to sell. They probably will find they have made a huge mistake, to say nothing of the gross injustice of the law.

The selling prices for breadstuffs will continue, as in the past, to be governed by the cost of production, transportation, and handling, the total due to these items being increased by the amount of whatever duty may be imposed in any country which is obliged to import because the domestic production is not sufficient for the wants of the people; and the indications are that the total cost of importing grain in Germany, irrespective of the duty, will be lessened in the future rather than increased, in spite of the prohibition of trading in futures at Berlin. The movement cannot be hindered by this puerile measure.

It is too early to say just what change in prices will result from the opening up to cultivation of the vast areas along and near the great transcontinental railroad in Russia, and the further development of the agricultural resources of Argentina. But it may be confidently stated that, as a modifier of such result, the prohibition of speculative trading in breadstuffs in Berlin will be of no more avail than was the Pope's bull against the comet.

## CAUGHT IN A WHEAT BIN.

"D'ye think you can tend her while I'm gone?" asked Uncle Burritt.

"Of course we can. We know exactly how to do it."

"So I s'pose, so I s'pose," said Uncle Burritt, as if his doubt of the ability of the boy and girl who stood before him to manage the big wheat elevator was wholly unfounded. "I'll be back as soon's I can," he continued, "an' if the Nancy Bell steams up 'fore I get back, you tell the cap'n to hitch and lay alongside."

"Oh, I can open the chutes," said Matt, eagerly. "Of course he can," chimed Laura.

"Better wait till yer old uncle gets back; he won't be long comin'." And Uncle Burritt, having shaken the wheat dust off his coat and combed back his hair before the cracked mirror, seated himself in his buckboard and rattled up the road.

Matt, who was 16 years old, drew himself up on the high stool in the office with some dignity. It was the first time he had ever been left in charge of the elevator, and he felt the importance of his position. His sister Laura, who was 13, peered out of the little window and wished something exciting would happen. And hardly had she wished when something did happen. The Nancy Bell began to toot down the river.

"Matt, there comes the Nancy Bell," cried Laura. A moment later a huge sidewheel river steamer

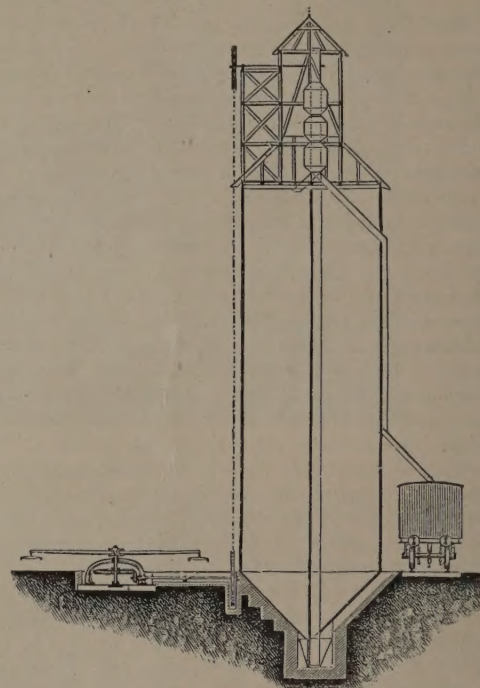


Fig. 21.

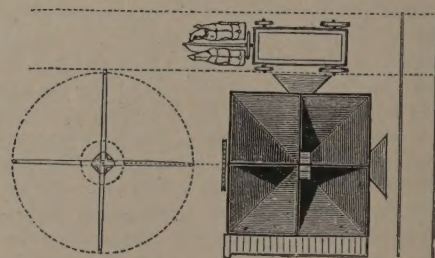


Fig. 22.

THE CONSTRUCTION OF GRANARIES.

came splashing around the bend and drew up under the rocky bank, on the top of which perched the elevator. The office where Matt and Laura were sitting was a hundred yards away, at the edge of the hill road. Here the farmers sold their wheat, which was emptied into a car, weighed and fruddled along a tramway that ran high on a trestlework into the top of the elevator, where the wheat was dumped into one of the various bins. At the bottom of the tall building a number of chutes led out over the water, and when open the wheat from the elevator poured through them into the steamboat below.

"Hey, there," called the captain of the Nancy



Bell, puffing up the steep bank, "are you ready to let us have that No. 1?"

"We're all ready, only uncle isn't here yet," answered Matt.

"Can't you let her go?"

"I could—"

"But uncle wanted us to ask you to lay alongside until he came back," completed Laura. The good-natured captain frowned.

"We won't get clear of Fisher's bar to-night, I'm

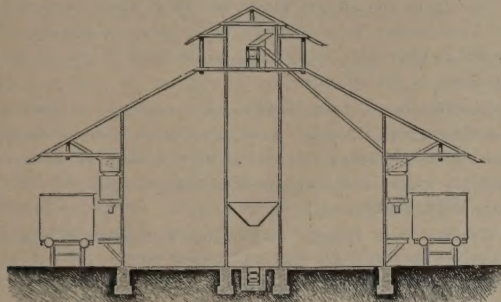


Fig. 23.

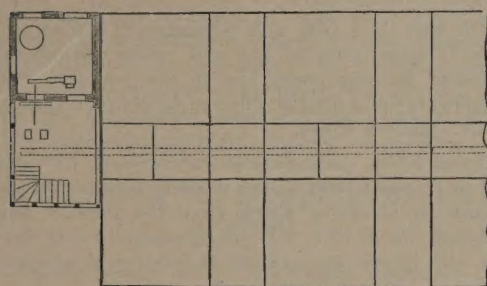


Fig. 24.

THE CONSTRUCTION OF GRANARIES.

afraid, if we wait. You've opened the chutes lots of times before," he said, turning to Matt.

"Oh, yes, I could do it all right. It's no trouble at all—"

Matt made as if to go down to the tramway toward the elevator, but Laura seized him by the arm. "Uncle told us to wait," she said, "don't go."

"Oh, he won't care," said Matt, impatiently, "I'm no baby." Then he pulled himself away and ran along the tramway. "Get your men ready," he shouted to the captain, "the wheat's coming." Matt's heart throbbed with excitement. He felt that he had suddenly attained to the dignity of manhood. He reached the deep bin where the No. 1 wheat was kept and clambered from the tramway down the little ladder to the hook which controlled the chute. He knew that when he opened it the thousands of bushels of wheat in the bin would go swirling slowly down through the chute into the steamboat.

"Are they ready, Laura?" he called.

"Oh, don't, Matt," answered the girl.

"Are they ready, I say?" called Matt, this time angrily.

Laura signaled to the captain with her hand, as she had often done before.

"Ready," came the answer.

"Ready," repeated Laura.

Matt pulled one peg and then, pausing a moment, pulled the other, and the hook dropped with a chug. He heard the grain swishing in the chutes far below. With the pegs in his hand he started to climb the ladder that ran up the sides of the bin. Just at the top one of the pegs slipped and fell into the wheat below.

Matt threw the peg which he still held on the tramway and scrambled down the ladder. He didn't want Laura to know about his carelessness, and he knew well enough that the peg must not be allowed to go down with the wheat or it might choke up the chute.

The peg lay on the wheat a few feet from the bottom of the ladder. Matt had often had occasion to cross the wheat in the bin, and so he waded out without any hesitation, his feet sinking in a few inches at every step.

Already the air was full of dust caused by the agitation of the wheat in the chute below, and Matt choked as he stooped to pick up the peg. Just as

he turned, one of his feet sunk down suddenly as if something deep in the bin had seized it. The next instant the whole center of the wheat in the bin sunk suddenly, and Matt found himself slipping slowly downward. With a startled cry he tried to reach the ladder. But the wheat below him was like quicksand. The harder he struggled and climbed the more wheat shelved off and slipped under his feet, and the more it seemed to him that an awful something deep in the bin had fastened to his feet and was dragging him down. The consciousness of having disobeyed his uncle lent terror to the situation, and the dust was becoming more and more choking. In that moment Matt recalled stories he had heard of men who had been suffocated in elevators, and he grew suddenly hopeless.

He had sunk almost to his waist when Laura appeared in answer to his repeated calls.

"Help!" he coughed.

Laura peered for a moment into the dark bin and then she seemed transfixed with terror.

"Run for help," called Matt.

Without a word Laura disappeared, flying down the tramway with flying hair. Reaching the office she suddenly realized that Matt might sink and be killed before she could get the men from the boat up the hill.

"What shall I do?" and she wrung her hands. Her eyes fell on an empty barrel in the corner of the office. The next moment she was spinning it along the tramway to the elevator.

"Here Matt, Matt," she called.

The boy, who was now waist-deep in the wheat, and had almost given up the struggle, hardly looked up. But when the barrel came bumping against him he seemed to recover.

"Hold on till I come back," cried Laura. Then she sped along the tramway and down the hill to the boat. With choking voice she told the captain of her trouble. There was no way of shutting off the sucking of the wheat through the chute from below, but a half dozen men with ropes and poles were soon speeding up the hill. Laura led them to the bin, but when she peered down she cried out in despair. Only the top of the barrel was visible in the sinking wheat.

"There, there, child; don't be frightened yet," said the captain.

In a moment two men with ropes around under their arms were wading in the wheat, while two others had succeeded in closing the chute. This pre-

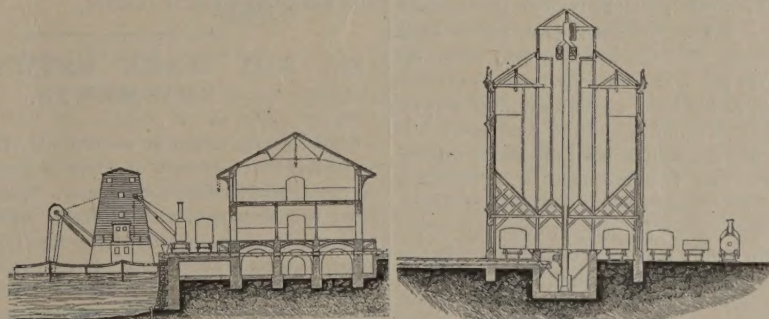


Fig. 25.

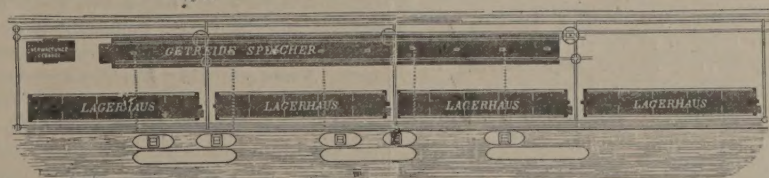


Fig. 26.

THE CONSTRUCTION OF GRANARIES.

vented further sinking of the wheat, but the dust was still suffocating. With poles and shovels they pried up the barrel, and when they lifted it out they found that it covered Matt's head and shoulders. But Matt was unconscious.

"If it hadn't been for the barrel he'd have died," said the captain. At last they lifted him out and he opened his eyes just as Uncle Burritt came into the office.

When Uncle Burritt heard the story he did not say a word to Matt, but he turned and laid his hand on Laura's head. Laura was still tearful. "My brave, obedient girl," he said.—St. Paul Dispatch.

## THE METRIC SYSTEM.

The London Times has recently given considerable attention and space to the discussion of the advantages to be gained by the adoption of the metric system. Lord Kelvin, whom many of our readers will recognize better under the more familiar name of Sir William Thomson, one of the foremost and most practical scientists of the century, writes as follows:

"In your very interesting leading article on the metric system you treat, in what seems to me a thoroughly clear and fair manner, the question at issue in respect to the demand for legislation on the subject.

"While not ignoring the preference of merchants and manufacturers and scientific men for the metric system, you rightly give prominence to consideration for the convenience of the poorer classes, 'who have no great power to make their voices heard, at least in such discussions as these.' If it were true that the adoption of the metric system would be hurtful, or even seriously inconvenient to them, that would be a strong reason against its being adopted in England. But in this respect we have happily a very large experience, and I believe it is quite certain that among the Germans, Italians, Portuguese and other European peoples who have had the practical wisdom to follow the French in adopting the metric system, all classes are thoroughly contented with it, and find it much more convenient for everyday use than the systems which they abandoned in adopting it.

"The great advantage of the metric system is its uniform simplicity, all measurements of length, area, volume and weight being founded primarily on the kilometer. The kilometer is very convenient for measuring great distances on the earth's surface, because a journey a quarter round the world is nearly enough 10,000 kilometers for almost all practical purposes. The thousandth of the French ton is the kilogramme; and the cubic decimeter, or the thousandth of the cubic meter, is the liter, which is the common popular unit for liquid measure; so that anyone who has correct weights can verify for himself his liters or other measures for liquid. This particular merit of the metric system, which, so far as I know, has not been much, if at all, noticed by your correspondents, is of very great importance in mechanics and engineering. In virtue of it the weight of any quantity of material is found in tons,

or in kilogrammes, or in grammes, simply by multiplying its volume in cubic meters, or in cubic decimeters, or in cubic centimeters, by its specific gravity; and thus a very great deal of labor which is entailed upon mechanical engineers, civil engineers and surveyors in England under the present system will be done away with when the metric system comes into use."

A duly authorized agent, acting on behalf of his principal, is not personally responsible on the contract, when the other party knows that he acts in the name and on behalf of the principal.



## FLAXSEED GRADES AT CHICAGO.

Some time ago we alluded to a difference of opinion between seller and buyer in the case of a quantity of seed tendered as of contract grade and so certified to by the inspector. On reference of the matter to the proper committee of the Board of Trade that body upheld the contention of the latter that the certificate of inspection was conclusive, and the tender therefore good. The case has attracted considerable attention, and resulted in an agitation of the question of the desirability of the amendment of the existing regulations governing the grading of flaxseed.

Section 1 of the rules as they at present stand reads as follows:

No. 1.—Flaxseed that is choice or prime, as also the same moderately intermixed with field-damaged seed, dry, sweet and free from mustiness, and having weight of not less than 50 pounds to the measured bushel of commercially pure seed, shall be No. 1.

It may be readily seen that this definition is elastic. It provides a minimum of qualifications considerably below those possessed by a large proportion of the seed sold in this market, and would hardly be accepted as an adequate description of what a majority of traders regard as choice "No. 1 Northwestern." The reasons for the adoption of the rule as framed are, however, easily seen. The flax growing territory tributary to this market extends over a latitude of some twelve degrees, and presents vastly varying conditions of soil, climate and humidity. The definition has been drawn in terms such as to include the product of this entire district, no allowance being made for the acknowledged variation in quality between the crops of different sections.

As a matter of fact, it is a common practice among traders on 'Change to specify in contracting, "No. 1 Northwestern," but this is not a grade specifically recognized by the rules, and is therefore officially unknown to the inspection department. When the terms of a trade simply call for "No. 1," the contract is filled by the delivery of any seed guaranteed by the inspector to comply with the requirements of the section above quoted. The disadvantages of such a state of affairs are obvious. Inasmuch as four grades of seed are virtually recognized on the floor of the Board it would seem more in accord with the fitness of things that the rules governing inspection should make a similar recognition. As matters stand at present, it is entirely possible for one so disposed to combine two widely different qualities of seed in such proportions that the mixture may come up to the standard of No. 1 flax laid down in the regulations, certainly to his own advantage, and maybe to the detriment of the purchaser and consumer.

The question has not a little been discussed among those interested, and two methods of preventing confusion have been suggested. The first is based upon geographical lines. In other words the advocates of this plan would recognize as a distinct grade all seed grown north of a fixed parallel of latitude. Such a course would be in effect to give official sanction to the distinction now practically existing between "No. 1 Northwestern" and "No. 1 Southwestern." The other method proposed is to establish a separate grade, having higher requirements than those at present prescribed for No. 1 seed. It is said that there might be two qualities of No. 1 recognized, the distinction being sharply drawn, and the determination in the case of any specific carload being made solely on the basis of quality, without regard to the locality where grown. There are arguments in favor of each plan peculiar to itself, and it may be that only a practical test could demonstrate which was the better.

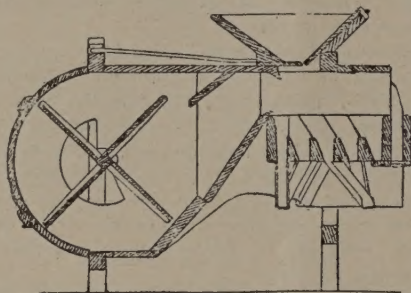
The matter in all its aspects has been much discussed, and recently a well attended meeting of traders was held to secure an interchange of views and obtain a definite expression of opinion on the policy of amending the rules for grading. The proposition was finally, however, voted down by the narrow majority of one. It is not probable that the matter will be allowed to rest here. The champions of amendment are determined, and the agitation will not be permitted to cease. The preponderance of argument would seem to be largely in their

favor, whether the question be regarded in its logical aspects or merely from the standpoint of expediency. Nor should it be overlooked that by making grades more definite the value of Chicago inspection would be enhanced, and considerable seed would find its way to this market, which is at present being diverted to other points.—Oil and Drug Review.

## A GRAIN GRADER AND CLEANER.

William Minnigh of Bradleytown, Pa., has designed a machine for cleaning and grading grain without the use of screens. The rotary fan is retained, but the grading is done by gravity. When a mixture of wheat, cockle and other seed falls through the opening at the bottom of the hopper into the blast-trunk the lightest kernels fly the farthest, and the heaviest ones drop straightest. By having four different chutes or channels leading from the bottom of the blast-trunk to different receptacles and properly adjusted with reference to the hopper, the grain will be separated into as many grades. If necessary, each of these may be fed through the machine again, and thus sixteen grades would be obtained, all depending on their relative weight. Perhaps the first grade of the original four would be the only one worth putting through a second time.

In order to prevent the air from the fan chamber going up into the hopper, a barrier or baffle-strip is inserted in the throat of the blast-trunk. This passage, by the way, is so small that the air is concentrated in it. The maker claims a compara-



tively slow revolution of the fan makes all the wind that is needed. As there are no screens to be agitated, only a very little power is required to operate the machine, and the bother of putting them in and removing them is avoided.

## DO NOT MAKE RETURNS ON SHIPMENTS.

About every week, or sometimes oftener, rumors or stories reach Duluth of some of the delinquencies of the Chandler-Hays Company. The latest comes from the Fisher, Minn., Bulletin, telling of several farmers or shippers there who are still looking for returns on their shipments. If we remember rightly, this same paper contained during the fall months of 1895 several reading notices for this same firm, telling how John Jones had got so much better account sales from the C. H. Company than his neighbor had who shipped to an old established firm in Duluth. Jones probably has the account sales yet; it will come in handy in getting a judgment. The neighbor has his money. We only refer to this matter now as an instance of the stupendous credulity exhibited by people who will be gulled by such stories. We do not doubt that cars of grain are still being consigned to this firm, with the expectation of getting the 2 or 3 cents more than the market that in most cases was promised, or perhaps they are looking for "free storage," or the ¼-cent commission that in some instances was given. We really have little or no sympathy with the people that were caught. The simple matter of addressing a letter of inquiry to the secretary of the Duluth Board of Trade would have saved a great deal of expense and loss to a great many people.—Duluth Commercial Record.

Grain trimmers and freight handlers of Superior, Wis., have reorganized their association, and have become members of the Longshoremen's Union.

## CHAFF

It is claimed that of 80 bucket shops in existence in Chicago on March 1 only 32 are now open, and they will soon disappear.

It is said that capitalists of Boston and Duluth are formulating a plan for building a double-track railroad from Duluth to the spring wheat district of North Dakota.

Owing to the efforts made by the Boston Chamber of Commerce the railroads now carry a bushel of grain to that port as cheaply as to New York, Philadelphia or Baltimore.

Electric bugs from Mexico were recently exhibited on 'Change at Chicago, and an attempt was made to convince the bears that they were a new species of chinch bugs which have illuminated eyes so they can work nights.

G. W. Van Dusen & Co. of Minneapolis have brought suit against the Fireman's Insurance Co. to collect insurance on elevator A2, which burned recently, on a policy for \$5,000. The company refused to pay the insurance.

The rich seem to be able to engage in almost any sort of sharp practice and still retain commercial freedom in these times, and in this country. The Armour investigation at Chicago furnishes a case in point.—Modern Miller.

Frank Klein, agent for the Northwestern Elevator Co. at Hancock, Minn., was recently arrested on the charge of obtaining \$2,900 from the Fidelity and Casualty Co. of New York on fraudulent wheat tickets. He is said to have lost the money in speculation.

The privilege of using the mails has been denied the Mutual Debenture Company of Iowa, having offices in Chicago and Emporia, Kan. Similar action has been taken against the Standard Seed Company, the Excelsior Seed Company and C. Hyman of Chicago, Ill.

A New York exporter says: "The quality of our American oats have met with great satisfaction abroad and headed off Russian competition. Natural oats weighing as high as 44 pounds, Winchester bushel, might well go to establish a reputation for us."

It is expected that it will take about a year's time to work off the wheat damaged in the burning of Elevator A2 at Minneapolis. There are between 600,000 and 700,000 bushels of this grain, which has been sacked and stored. After it is cleaned it will be sold for chicken-feed, the sale being carried on gradually.

The even tenor of the grain business at Buffalo this season is agreeably surprising the grain men. Most of the profit is not now taken off in shipping grain, and the latest improvement is a reduction in the cost of transferring. The transfer elevators have an employe appointed by the Merchants' Exchange to do the weighing out and inspecting, one charge being made.

Justice of the Peace Spitz of Kansas City, Mo., decided recently that Oscar C. Hurd, C. R. Pardell and William L. Bibbs, who were arrested May 18 for conducting a bucket shop, were not guilty of the offense charged, and they were dismissed. It was shown, Justice Spitz said, that "the grain supposed to be purchased could be delivered if desired by the speculator." This very fair minded justice would, no doubt, permit a thief to return goods when caught and go free.

A member of the Chicago Board of Trade, who has been abroad about a year, says: "The people in France do not care anything for our grain, our meats, or our sausage. They think they are practically independent of us. They don't want to buy anything from us, and want gold for everything we owe them. There is an import duty on our wheat in France of 36.8 cents; in Germany, 32.3 cents; in Italy, 36.8 cents; Portugal, 58.7 cents; Spain, 42 cents; Sweden, 25½ cents; Norway, 1.6 cents, and Austria, 19.5 cents. These duties shut us out as wheat sellers to a large extent, and we should put a heavy duty on their wines."



## THE ENOS ELEVATOR AND DUMP.

W. H. Enos of Waldron, Ill., has invented what he claims to be a successful elevator and dump for quickly and easily disposing of grain from farmers' wagons. The apparatus is designed to hoist the wagon box with its load from the trucks to the top of the cupola, whence the grain may be dumped onto a chute which deflects it into any one of the adjacent storage bins. The power for elevating the load is furnished by the farmer's team, the hoisting tackle being so arranged as to make this work very easy for the horses.

A large stirrup is placed over each end of the wagon box to elevate it and in the top of each stirrup is a pulley around which are passed the pendant loops of the hoisting rope. This is wound around the large drum, which is turned as the horses pull off another rope wound around a pulley on the end of the drum. The hoisting rope is passed around a central transverse shaft at the top of the cupola, which may be turned either way by a sprocket chain running up from the working platform. Turning this shaft tilts the wagon box and the tail board being released the grain is dumped into the chute. The wagon can be driven in from either direction, and the grain discharged into either bin. Bins can be constructed on each side of the driveway, and also at each end, the chute being movable and reversible. An outside discharge chute can be provided for loading grain into wagons for removal.

## ONE CAUSE OF SHORTAGES RUN DOWN.

The Minnesota State Government maintains an effective supervision over the weighing of grain at grain markets and country points. Whenever shortages are complained of the scales of the receiving and shipping elevators are thoroughly investigated and no pains are spared to discover the cause of the discrepancy. An instance of this kind is recorded in the recent report of the State Railroad and Warehouse Commission, from which we take the following:

The administration of the laws relating to the grain business of the state, both at country points and at terminals, is a part, and by no means a small part of the duties of this commission. For the details of this work we refer to the report of the chief grain inspector and state weighmasters, but for the purpose of illustrating the character of some of the complaints in this regard from country points and how such complaints are investigated by the commission, we append the following correspondence:

Fairmont, Minn., Aug. 17, 1895.

Hon. Geo. L. Becker, St. Paul, Minn.

Dear Sir:—Facts have recently been brought to my knowledge which lead me to believe that grain is being systematically stolen from cars in the Minneapolis yards, especially on the Chicago, Milwaukee & St. Paul Railway tracks.

The Ward-Cadwell Company of this place carefully weigh every car they ship, and for some time past there has been large shortages at the Minneapolis yards. They ship to other points and have no trouble. Other buyers here make same complaints. I would suggest that you put a detective to work and ascertain if a gang of weighmasters are not working in cahoots with thieves who are engaged in a wholesale system of robbery.

From my own personal knowledge I know that there is good ground for believing that something is rotten in the state service at Minneapolis.

Kindly give this matter your early attention and oblige,

Yours truly,

FRANK A. DAY.

Upon receipt of the above the commission directed that a thorough investigation be made at the Minneapolis elevators where the grain of above named shippers had been received; nothing being found wrong there, the commission directed that its scale expert and its supervisor of country elevators go to Fairmont and test the scales at the shipping elevator. The following report shows that the trouble was found there. A copy of the report, together with a letter, was sent to the complainant.

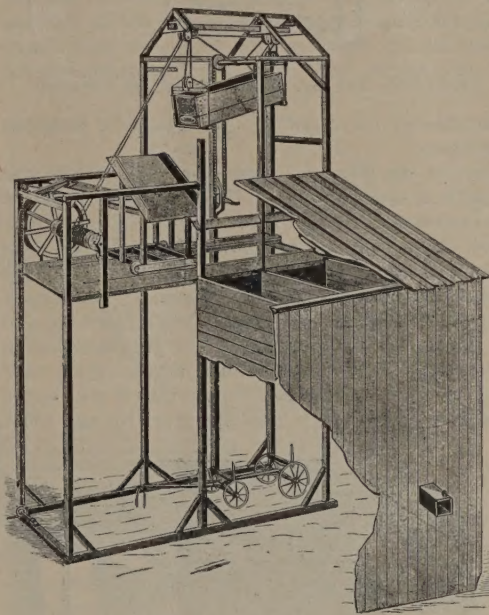
The report of the supervising inspector, R. C. Burdick, to the Railroad and Warehouse Commission was as follows:

Gentlemen:—In the matter of shortage in ship-

ments complained of by the Ward & Cadwell Company of Fairmont, I beg to make the following report:

In accordance with your instructions and accompanied by Mr. L. D. Berry of the weighing department, we proceeded to Fairmont on the 22d, and upon arrival there interviewed the parties complaining, who expressed themselves as highly pleased at the interest taken in their case by your board, and also expressed a desire and willingness upon their part for the fullest investigation in the matter, and if the trouble was in their elevator they wanted it corrected at once, no matter at what cost.

Their house is a well constructed house, and is operated by a gasoline engine, the party in charge having been in their employ some three years, and in whom they have the utmost confidence. It is equipped with two sets of Fairbanks Scales, one set of 3,000 pounds' capacity used for "weighing in" from the farmers' wagons, and another of 15,000 pounds' capacity, situated in the top of the elevator, and used for "weighing out," or shipping out of the house to other points. It is what is technically termed "half car" scale, and the testing of this scale was the principal object of our visit. As a preliminary the "weighing in" scale was tested first in the presence of all parties connected with the



THE ENOS ELEVATOR AND DUMP.

house, and upon its being loaded to its capacity it was found that the hopper of the scale "tilted" or settled over against the window casing of the building and caused a "bind," making a discrepancy of about 25 pounds in each draft of 3,000 in favor of the house. This "bind" was so plain that it is a wonder that it has escaped discovery by the party in charge. Upon the obstruction being removed the scale was found correct. Our attention was next given to the "weighing out" scale, and it was tested up to 3,200 pounds, which was the load of the other scale transferred to this one. With only this load on the scale failed to respond properly, and Mr. Berry at once pronounced it faulty; but darkness coming on, further investigations were delayed until the next morning. Meantime orders were given the men to load the scale with its usual load of grain, say 15,000 less 1,000 pounds to be used by the test weights. Upon resuming operations the next morning it was found that the scale could only be loaded up to 10,000 pounds, that being all the grain they had in store, which was disappointing to us, as we wished to learn the full discrepancy of the scale.

However, Mr. Berry made a thorough examination, and discovered that with this two-thirds load the hopper bound upon what we call the sub-hopper, and, of course, prevented an accurate weight being taken, and this would result in a loss to the shipper. But a further examination developed the fact that the head of a bolt bore upon one of the compensating or weighing levers in such a manner as to show a false increase in weight of its contents, leading shipper to believe there was much more in the hopper

than there really was. Now the failure to get a full load into the scale would prove a bar to ascertaining the discrepancy, as it is apparent that the heavier the load the more the discrepancy, etc. All this was pointed out to Mr. Stowe, the president of the company, and to Mr. Wahlbeater, the manager, and upon the obstruction being removed the scale tested absolutely correct. In conclusion would say that the parties expressed themselves as perfectly satisfied with the results of our effort to locate the trouble.

This solved the trouble to the satisfaction of all concerned, and the Lieutenant Governor withdrew all other charges gracefully.

## RAILROADS SUED BY GRAIN SHIPPERS.

The damage suits of the members of the Grain Dealers' Association of Northwest Iowa against the different railroads of that section of the state were filed for record in the office of J. H. Bolton, clerk of the Federal Court at Sioux City, Iowa, May 19. The suits filed aggregate \$184,864.62, and are brought for different amounts by seven grain dealers. There were 70 members of the association at the recent meeting in Sioux City, and Spencer Smith of Council Bluffs, ex-railway commissioner, was engaged as attorney for the association. He has filed seven suits, and it is understood others will be filed later. The suits are brought to cover a period extending from Jan. 1, 1891, to date. The petitions in all the cases are similar, except that in some there are more counts than in others. However, each makes the same allegations, that extortionate rates have been charged shippers for transportation of grain from Iowa points to destination. The amount of overcharges alleged ranges from a fraction of a cent to 5 cents per 100 pounds on the different kinds of grain alleged to have been shipped.

The contention of the railroads is that "prior to 1891 they made the shippers a rate on the different classes of grain. This rate was continued until the railroads found it was inadequate to make expenses, and accordingly the rate was increased to such a figure as the railroads deemed proper. Now they say the grain shippers are suing for the amount over and above the temporary low rate made by the railroads."

The railroad officials who are laboring under this misapprehension of facts should, in justice to themselves, look up an order of the Interstate Commerce Commission establishing fair and reasonable rates on grain from Iowa points. It may serve to freshen their memory as to how long they maintained those rates, and why they revoked them. The members of this association have successfully sued rail carriers for overcharges before, and there is good reason to believe they will succeed this time.

The suits and amounts of damages asked are as follows: O. L. Van Patten of Charter Oak, Iowa, vs. the Chicago, Milwaukee & St. Paul Railway Company, \$39,906.25; Rufus Ames of Alford, Iowa, vs. the Sioux City & Northern Railway Company, \$39,015.94; E. M. Cassady of Whiting, Iowa, vs. the Sioux City & Pacific Railway Company, \$38,065.41; E. J. Edmunds of Marcus, Iowa, vs. the Illinois Central Railway Company, \$37,920.53; Alex. Fraser of Aurelia, Iowa, vs. the Illinois Central Railway Company, \$16,998.22; Harris Elevator Company of Sibley, Iowa, vs. the Burlington, Cedar Rapids & Northern Company, \$6,431.59; William Smiley of Le Mars, Iowa, vs. Chicago, St. Paul, Minneapolis & Omaha Railway, \$6,526.48; F. D. Babcock of Ida Grove, Iowa, vs. the Chicago & Northwestern Railway Company, \$146,117.18; C. M. Cooney of Anthon, Iowa, vs. the Illinois Central Railway Company, \$28,610.50; T. S. Cathcart of Des Moines, Iowa, vs. the Chicago & Northwestern Railway Company, \$23,961.75.

It is the duty of an agent to keep the property of his principal separate from his own, and not to mix it with the latter; and if he does not keep it separate from his own, and afterwards is unable to distinguish between the one and the other, the whole will be adjudged to belong to the principal.—Business Law.



### APPARATUS FOR DEADENING NOISE OF EXHAUST.

Letters patent have been granted F. L. Serment of Marseilles by the British Patent Office for an improved throttling apparatus for deadening the noise produced by the exhaust of gas and vapor motors. It is composed of a receiver A in which is cast, or, if necessary, fitted (in the latter case the receiver is provided with a cover), a conduit D in the shape of a flattened trumpet having its discharge orifice a of rectangular shape, so that the gases entering at E are discharged in a thin layer taking a gyratory motion, expanding in the interior of the reservoir. They are then forced to deflect in order to follow the exit pipe S which projects in the interior up to the center of the reservoir. For motors of larger size the apparatus is constructed on the same principle, but with larger outlets into spaces of various shapes. It is always composed of a reservoir A in the interior of which is arranged a cylinder B (Figs. 3 and 4). The gases enter the reservoir by a tube, the direction of which forms a tangent to the inner surface of the reservoir for the purpose of imparting thereto a gyratory movement. The gases escape first into a circular gallery F formed by the cylinder B, being retracted and tangent thereto along an incline h which is itself a tangent to the curve of entry of the inlet pipe E. To insure the gyratory movement, the gallery F is closed near the inlet E by a partition C. After the first expansion in the gallery F, the gases expand again in the passage G, which has a crescent-shaped section; they are then deflected to pass into the outlet pipe s which projects into the interior of the reservoir. All these channels and expansions are combined to disturb the sound waves and thus destroy the noise.

### SEED EXPORTS AND IMPORTS.

Seeds valued at \$158,429 were exported in April, against an amount valued at \$171,673 exported in April, 1895; and exports during the ten months ending April were valued at \$1,435,810, against \$2,786,972 for the same time of 1894-95.

Clover seed aggregating 552,645 pounds, valued at \$43,476, were exported in April, against 1,018,839 pounds, valued at \$96,544, exported in April, 1895; and during the ten months ending April 5,296,239 pounds, valued at \$418,127, were exported, against 22,663,033 pounds, valued at \$2,102,924, exported in the same time in 1894-95. Cotton seed aggregating 2,867,041 pounds, valued at \$19,845, was exported, against 564,234 pounds, valued at \$3,977, exported in April, 1895; and during the ten months ending April 21,404,563 pounds, valued at \$137,842, were exported against 9,738,657 pounds, valued at \$78,108, exported in the same time in 1894-95.

There was no flaxseed exported in April, against 20 bushels, valued at \$19, exported in April, 1895; and during the ten months ending April 28,966 bushels, valued at \$31,509, were exported, against 1,217 bushels, valued at \$1,419, exported in the same time in 1894-95. There were 1,988,810 pounds of timothy seed, valued at \$75,395, exported in April, against 1,006,495 pounds, valued at \$56,382, exported in April, 1895; and during the ten months ending April 11,024,405 pounds, valued at \$487,006, were exported, against 4,752,497 pounds, valued at \$267,314, exported in same time of 1894-95.

Other seeds exported in April were valued at \$19,713, against \$14,751 for April, 1895; and exports during the ten months ending April were valued at \$361,326, against \$337,207 for the same time of 1894-95.

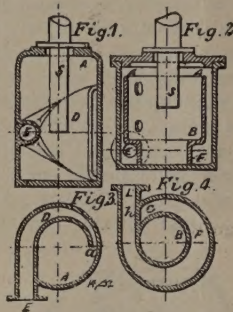
There were 6,235 bushels of flaxseed, valued at \$7,686, imported in April, against 425,747 bushels, valued at \$392,418, imported in April, 1895; and during the ten months ending April 715,159 bushels, valued at \$772,319, were imported, against 3,410,467 bushels, valued at \$3,849,125, imported in the same time of 1894-95.

All other seeds imported in April free of duty were valued at \$128,052, against \$80,890, for April, 1895; and importations during April were valued at \$1,114,518, against \$1,236,684 for the same time in 1894-95. All other dutiable seeds imported in April were

valued at \$17,221, against \$26,130 for April, 1895; and importations for the ten months ending April were valued at \$553,014, against \$634,188 for the same time in 1894-95.

### A NEW AUTOMATIC WEIGHING MACHINE.

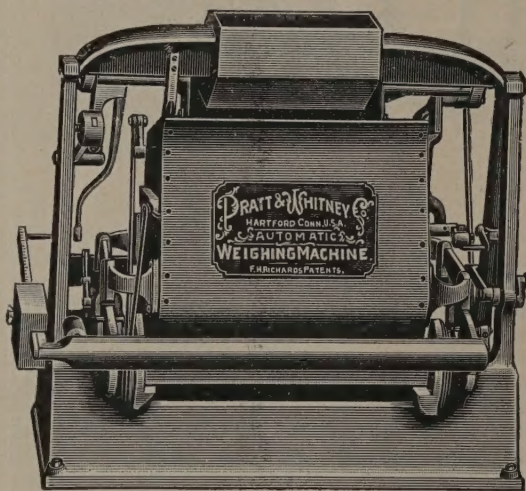
Automatic weighing machines have been on the market many years and for much of that time they had a very black eye. A number of grain dealers, after an expensive experience, would have nothing farther to do with them. Improvement has followed improvement until the automatic scale of to-day is not recognized by those who threw away time and money experimenting with defective



APPARATUS FOR DEADENING NOISE OF EXHAUST.

machines of the early days of automatic weighing machines.

One of the latest machines perfected in this line is the new model automatic weighing machine placed on the market by the Pratt & Whitney Co. of Hartford, Conn. The machine is well made of the best materials suited to the purpose, and is said to have given satisfaction wherever used. It is claimed that it will weigh accurately, count correctly and by means of valves working on the interlocking principle it is certain to weigh all the grain once and but once. The makers claim that it will weigh nearer correct than is possible to do by any other



known method, and report some extensive weighing tests which show a remarkable accuracy.

The machine hangs in a very strong iron frame, so it is almost independent of its foundation and surroundings. It will work fast or slow, according to how fast the grain is removed from below it. When it is desired to weigh grain the machine is first tested. This is done by throwing the interlocking parts out of gear, unfastening the poise and moving it back to 0 on the beam. If the scale is in perfect balance it will be indicated by a needle pointing to a test mark made on the frame.

Every scale is thoroughly tested at the factory before being sent out. When the scale is put in perfect balance the gear is thrown in and the slide in the spout above the machine opened. As the amount of grain in the scale hopper approaches the weight at which the poise is set, an arm swings down, reduces the feed and is intercepted by one end of a small, light piece of iron which swings easily on a pivot. This prevents the momentum of the hopper

from carrying it down and dumping the load before the correct amount of grain is in it.

The instant the correct amount of grain is in the hopper the flow of grain into the hopper is completely shut off, and as soon as it is shut off the bottom valve is opened and the grain is permitted to fall out. These valves are interlocking so that but one can be open at the same time. The bottom valve will not close until the last kernel of grain has fallen from the hopper, so if the grain is not removed quickly it will not weigh rapidly.

The bearings are all finely constructed knife blades. The construction of the supports of the blades is such that no binding can occur. Where the working parts come in contact with one another they have roller bearings, and every effort is made to reduce the friction to a minimum.

The new register or counter which is placed on these scales to record the number of times the scale dumps grain is absolutely correct. It is connected in a positive manner with the valve at the bottom so that the opening of it to discharge a load must necessarily operate the register. It is interlocking so it is impossible to make it count more than once with each discharge.

The sizes of the machines produced so far, range from one pound to 25 bushels, bucket capacity, all of the sizes being substantially the same organizations and adapted for weighing all kinds of materials which can be supplied through a spout. A machine for weighing flour has not yet been placed upon the market, but will be.

### SHE WOULD DEAL IN BUCKETS.

A well-known citizen who resides in Northwest Washington is a patron of a certain bucket shop, says the Washington Star. His wife was informed of the fact and accused him of it with so much directness that he could not deny it.

"You made \$200 in buckets in some shop didn't you?" she demanded to know.

"Certainly, dear. You see the war in Cuba creates a great demand for buckets and there is a place where you can give your orders and sell them again at a profit."

Nothing more was said, but the wife concluded to make some money on buckets and not let her husband know it. In some way she learned the location of the bucket shop, and going down town told who she was, and said:

"I want \$100 worth of buckets. The same kind my husband bought."

"It is a little risky to-day, madam," said the proprietor, who did not want to explain the operations of the place.

"I don't care," she urged. Here's the money. I'll come after the buckets to-morrow."

The next day she appeared and was informed that the buckets had been bought and sold at \$100 advance, but that the supply was exhausted and they were going into the wheat and corn business until more could be manufactured.

"I don't want any wheat or corn," she said, "but ain't it mean, I can't buy any more buckets?" And the husband congratulates himself on how he succeeded in getting the bucket shop proprietor to stop his wife's dealings without revealing their nature, while she is a spring hat and a dress ahead.

### ANNUAL MEETING OF THE ILLINOIS GRAIN DEALERS' ASSOCIATION.

The eleventh annual meeting of the Illinois Grain Dealers' Association will be held in Decatur, Ill., on Tuesday, June 23, 1896, for the purpose of electing officers and transacting other business.

There will be a morning and afternoon session, after which there will be a banquet and toasts, and other entertaining features.

Be sure and come, and invite your neighbor grain dealers.

Do not forget the day and date.

JOHN CROCKER, President.

B. S. TYLER, Secretary.



### CO-OPERATIVE GRAIN WAREHOUSE FAILURES.

The Republican was rather severely criticised not long since for advising the farmers of Minnesota to exercise ordinary business caution before taking stock in farmers' coöperative grain warehouses. Some very recent experiences in this line of business enterprise emphasize the timeliness and value of that advice. For example, here is a significant paragraph from the St. Paul Pioneer Press of late date:

It begins to look as if there was one thing farmers in and about Madelia could not manage, and that is the "farmers' warehouse." A suit has just been brought against the company for nearly \$10,000 by local parties, who are suing to get their rightful dues. It seems there was dealing in options with either a St. Paul or Minneapolis firm, and they may be brought into the matter before it is settled. The farmers' company has a very fine elevator, and by selling the plant will be able to discharge all obligations. Whether it will be able to buy grain this fall will be a doubtful matter.

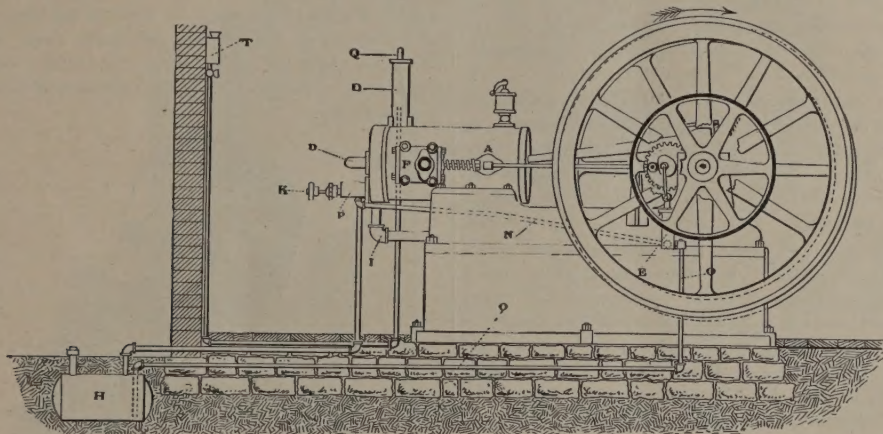
And here is another from the Enterprise, a paper published at Kentland, Ind., which shows that failure in coöperative grain dealing is not confined to any one state or locality:

As usual in such cases, the stockholders of the Farmers' Elevator at Goodwine found, on balancing their books, that there is a balance of \$3,000 on the

high order of talent busies itself with its own affairs and is not procured at rates that farmers accustomed to small returns are willing to grant. Mediocrity is secured that in the absence of personal interest is unable to match the personal interest of a higher order of talent. But mediocrity elevated into a brief importance is capable of its own ambitions, and too often is inclined to attain them by dishonest practices, while favoritism creeps in and disorganizes. Despite these well-known and powerful influences stimulated by the acute conditions of rural interests and more and more marked contrast between the power of the organized and unorganized in the face of the history of coöperative farm movements, a coöperative period among farmers is growing apace. Will it succeed?

### THE FAIRBANKS-MORSE GASOLINE ENGINE.

No argument is now needed to convince an elevator man of the utility of gas and gasoline engines in furnishing power. Danger of explosion overcome removes the last possible objection to gas as a motive power. That the Fairbanks-Morse Engine is considered safe and reliable is evidenced by the fact that the Chicago Board of Fire Underwriters do not increase insurance on account of its being used. The position of the supply tank of this engine, which is lower than the engine, and generally placed underground, insures perfect safety. The engine is the re-



THE FAIRBANKS-MORSE GASOLINE ENGINE.

wrong side of the ledger. Every man to his own business, and it is a safe rule to fight shy of the coöperative institutions.

A third instance which may be mentioned is that of the coöperative elevator at Preston, Minn., the failure of which was due to mismanagement or speculative ventures, or both combined.

The buying of grain in considerable quantities, its handling, transportation, and final disposition, are matters which, to insure even ordinary success, require the exercise of the keenest business instinct and experience. These qualifications are not to be found on every section of land, though apparently a contrary opinion prevails in certain quarters where the coöperative idea is growing more rampantly than the general run of vegetation under the influence of a warm sunlight and an unusual abundance of spring rains.

We shall gladly hail the advent of the able and honest man who can conduct a farmers' coöperative grain warehouse with noteworthy success. Thus far we have not heard of or from such a rarely gifted person. What the principal causes for this state of things are it is not our present business to inquire. We simply state the facts as they exist. —Winona Republican.

The Mirror and Farmer in commenting on this subject says: The tendency of farmers to organize is more easily comprehended than their failure to accomplish their ends under organization, and yet history in the wrecks of coöperative efforts strung all along the past century has made it apparent that in sinking individualism the most potent factor of success is lost. The agent of a mass of men does not bring to his position that keen, tireless energy and skill that face all obstacles with the zest he introduces into his own business. And then, too, a

sult of fourteen years' experience, and great economy and simplicity is claimed for it.

The engine manufactured by Fairbanks, Morse & Co. of Chicago is shown in the accompanying cut. The different parts are as follows: A cylinder, H gasoline supply tank, I air suction pipe, N pipe from pump E, O supply pipe from tank to pump, Q igniting tube, D chimney, T burner supply tank connected to a Bunsen Burner for heating the igniting tube. The pump, which is simple in construction, keeps gasoline in a small brass reservoir holding one-eighth of a pint at a level fixed by the height of the overflow pipe, which returns the surplus to the supply tank. A highly sensitive governor or crank shaft regulates the consumption of gasoline. The supply or throttle valve K controls the amount of gasoline taken from the reservoir, which makes the charges of gas of equal strength and value.

There is a practical way of using gasoline. There is no attempt to vary the force of charges, the number of charges being regulated instead. There are no delicate valves, and there is never any gasoline subject to pressure or force, either by the action of the pump or by having the supply above the opening where the liquid and air come together. This is said to obviate a tendency to leak through stuffing boxes, couples, etc., and the manufacturers claim that leakage is impossible. The engine uses all the gasoline in the tank. It is claimed to work with perfect regularity, without loss of power or increased consumption of gas, in cold or warm weather.

The manufacturers have given special attention to the general construction of their engine. The crank shaft is of forged steel with bearings of brass. The brass boxes for wrist-pin and cross-head pin in the piston are supplied with easily adjusted take-ups. There are two valves for admission and exhaust,

both taper seated puppet valves, and water jacket. The piston and cylinder are of extra length, which adds to the life of the engine, and the cylinder is jacketed. The engine is fitted with either tube or electric igniter, or both. There is no carburetor used, fresh gasoline being sucked into the cylinder.

The Fairbanks-Morse Gas Engine can be worked with coal gas, oil gas, generator or producer gas, natural gas and gasoline. It is made in ten sizes, from 3 to 75 horse power.

### INSPECTION AT SUPERIOR WILL BE CHANGED.

The matter of inspecting and weighing grain at Superior, which came before the trade in the form of a warehouse bill passed by the Wisconsin Legislature a year ago, will soon be agitated again. The board of directors of the Superior Board of Trade, through Secretary Atkinson, has written the Railroad and Warehouse Commission of Minnesota to the effect that the present system of weighing and inspecting grain in vogue at Superior will not be continued after August 31, under present conditions, thus serving upon the Board the 90-day notice required before a change is made. Secretary A. K. Teisburg has replied that the Commission will make all necessary arrangements for a withdrawal of the Minnesota system of weighing and inspection from the Superior market on the date mentioned.

It is not given out what system the Superior Board intends to adopt, provided a change is made, but likely an independent plan of inspecting and weighing will be improvised under Section 12 of the Warehouse Bill, which grants the Superior Board power to make a change. The bill was framed and passed with a view of inducing the several elevator companies which have houses at Superior and offices at Duluth to transact their business on the Superior side of the bay. The statement is made that the law has failed to accomplish this; that the Globe Elevator Co. has followed the spirit of the law; that the Superior Terminal and Belt Line companies have only done so in a perfunctory sort of way, and that the Great Northern Co. has paid no heed to it whatever.

Under these conditions the directors of the Superior Board are said to feel warranted in making the change in inspecting grain which they have always desired, and which they hope will bring these companies into line. The feeling also seems to prevail that the Superior Board should have a portion of the revenue from inspecting and weighing grain at Superior, all of which now goes to the State of Minnesota. The advisability of taking the step just now is questioned in some quarters, while by other interests it is regarded as quite the proper move. Whether the agitation will prove practicable or not, will, unquestionably, be determined later on.—Superior Correspondent of the Northwestern Miller!

### MANITOBA'S NOXIOUS WEED ACT.

Information has been received by the Manitoba department of agriculture and immigration that the following section of "the noxious weeds act" is openly violated by elevator companies in the province, and warning is given by the department that prosecutions will follow any violation of the act: Section 20. Any person selling or otherwise disposing of any cleanings or other refuse containing seeds of noxious weeds from any elevator or mill, without first destroying the germinating qualities of such seed of noxious weeds by grinding or otherwise, shall be liable to a penalty of not less than \$25, nor more than \$100. Cards bearing the above have been sent to all the elevators in the province and in the interests of wheat producers it is hoped the warning will have the desired effect.

Grain buyers will find Davis' Grain Tables an invaluable book. With them one can tell at a glance the value of grain and produce weighing 32, 48, 56 and 60 pounds per bushel. It will be sent, together with the "American Elevator and Grain Trade" one year, for \$1.50.



## THE BUCKET SHOP MAN.

BY ERASTUS.

The bucket shop man sat in his easy chair,  
And a red, red beard had he;  
His eyes glowed bright as they roved around,  
On his office screen and his minions three;  
And he called aloud to his office boy,  
"Bring me my mail, avaunt and ahoy."

The mail was brought, with eager eye  
And an itching palm he turned it o'er,  
He said to himself, as he took his knife,  
It seems here are checks and money galore;  
The last batch of circulars my minions sent out  
Has brought in returns without a doubt.

He counted his money, Oh, rare display  
Of bills and checks to a large amount;  
Yet he made no investments that morning, Oh, no,  
It all went to his private bank account;  
Then he sat him back in his easy chair,  
And great clouds of smoke puffed he in the air.

## COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

## SHIPPING AT TACOMA.

*Editor American Elevator and Grain Trade:*—According to the report of the harbor-master of the port of Tacoma, Wash., for the month of May, the total exportation of breadstuffs was as follows: Wheat, 122,931 bushels, valued at \$77,450; flour to China, 13,313 barrels, valued at \$38,436.27. The inward registered tonnage was 53,293, inward cargoes 3,613 tons; outward registered tonnage 41,510, outward cargoes 51,300 tons. The deep sea arrivals were 37, departures 36.

SAMUEL COLLYER,

Secretary Chamber of Commerce.

Tacoma, Wash.

## GRAIN DEALERS WILL MEET.

*Editor American Elevator and Grain Trade:*—I would like to call the attention of all grain men in the territory of the Grain Dealers' Association of Southwest Iowa and Northwest Missouri to a meeting of our Association to be held at Council Bluffs, Iowa, at 7:30 p. m., June 16. Every grain dealer should be represented at this meeting if possible, whether he is a member of the Association or not.

This is a young association, and needs the support of energetic men. We started out with a membership of forty last March, which is now largely increased. The interest of the members has continued, and good feeling exists among us. The good work which the Grain Shippers' Association of Northwestern Iowa is accomplishing is well known and appreciated by the trade. If enough interest is shown in our Association we hope to be able to confine track bids to regular reputable grain buyers and shippers, which will be a great benefit to the trade. Our meeting on June 16 will be the most interesting and important one the Association has yet held, and a large attendance is earnestly desired.

O. R. GANIZE.

## THE SUPERSTITION REGARDING THE DANGER OF GASOLINE.

*Editor American Elevator and Grain Trade:*—That there still remains in the minds of some intelligent men the superstition of the danger of gasoline, some may reasonably doubt. Surprising as it is, such a superstition does exist, though it has of late been largely modified, as gas engines have come more and more into favor as prime motors. An ordinary examination of the construction and working principles of an engine ought to be enough to convince anyone whether it is "dangerous." (This expression probably means that some part of the engine is likely to burst.) A little more than a cursory investigation of an engine, united with some knowledge of what gasoline is, will make assurance doubly sure.

It is unfortunate that a knowledge of fire does not always keep us from getting burned. It is a fact that explosions of gasoline have been known to occur—rarely, to be sure, but often enough to maintain in the minds of some, who are more cautious than wise, the superstition that one of the properties of gasoline is danger. What have been the causes of the explosions that have actually occurred? In almost every case it is on account

of carelessness on the part of the operator, or an absolute ignorance of the construction and working of the engine. In the first place, gasoline itself is not explosive. If a lighted match were thrust into gasoline it would be extinguished, but if it ignited the gas from the gasoline, the experimenter would be extinguished. It is always safer to have the tank outside the elevator, and no one should be allowed to examine its depths with a torch to see if it is empty.

Since the gas or vapor is the explosive element of gasoline, the operator should look out for leaks. It is extreme folly to attempt, in setting up a gas engine, to improve upon the manufacturer's instructions unless you are an expert. There is ever-present danger, also, in being careless about this work. The operator should be sure that all fittings and joints of pipes leading to the supply tank are tight. The smallest leak should not be passed over.

An understanding of the dangers peculiar to gasoline is the way to avoid them. They no longer become a superstition.

G. P. PLANT.

## PUBLIC ELEVATOR MEN AS GRAIN DEALERS.

*Editor American Elevator and Grain Trade:*—I have been watching with much interest the progress of the suit of the Attorney-General of Illinois against the public warehousemen of Chicago in regard to their right to deal in grain. As answers to the Attorney-General's charges have been filed, the question will probably soon be decided.

It is interesting to glance over some of the answers to the charges against the public warehousemen. In the first place, they call attention to their own great importance in the grain trade of Chicago and the West (the development of which cannot be altogether attributed to them, however). They state also, in a way that would imply they never felt the halter draw, that the laws regulating public elevators are ample and sufficient to prevent any fraud, imposition or dishonesty, and that such laws have been effectually administered. This good opinion of the law should be taken with the usual grain of salt that makes such morsels palatable.

The company giving this opinion hastened to deny emphatically that it had ever bought, sold or dealt in grain on its own account and stored it and mixed it indiscriminately with that of customers, although it claims it would have a perfect right to do so if it chose. At the same time the defendant asserted that such business was absolutely necessary for the successful operation of a profitable warehouse. According to this the company is in business for its health or for the benevolent purpose of helping on the grain trade of Chicago.

It is generally admitted that not less than three-fourths of all the grain received in the public warehouses of Chicago is the property of persons interested in the corporations operating the elevators, and that it is mixed with the grain of customers. But, of course, defendants indignantly deny that they ever deliver to holders of warehouse receipts grain or seed of a quality inferior to that which the holders of the receipts are entitled to receive. What t' 'ell! Of course not. Of course public elevator men should avoid increasing their profits by judiciously mixing their customers' grain with their own. Of course there is no temptation to do that in public elevators which exist solely for the purpose of storing the grain of the trade. Of course grain men have never complained of such a thing being done.

An interesting statement in the answer of one defendant is to the effect that "though capable of receiving unlimited amount of grain for storage, the public warehouses of Chicago have in the past few years received comparatively little grain except that owned by persons interested as owners, lessees or managers of the warehouses. Provided the defendant should be compelled to operate its warehouses without being permitted to store the grain of its stockholders it would be impossible for it to pay running expenses. This condition of things has been true for several years past, it is stated, of every warehouse corporation doing business in Chicago. So that under a ruling holding Attorney-General Maloney's interpretation of the law to be

the correct one, the ultimate result would be to drive the twenty-five corporations and individuals operating elevators in Chicago out of a business employing millions of dollars of capital, and the amount of grain shipped to Chicago would decrease 50 per cent."

Unfortunately, that is not an argument. Public elevators have no divine right to a parasitical existence in the grain trade. Let public warehousemen conform to a just regulation of their business, and they will get the support of the grain shippers and receivers. Although I think it would be highly desirable that the Attorney-General's efforts in this direction be successful, that can scarcely be expected.

J. T. MORSE.

## IGNORING COUNTRY BUYERS.

*Editor American Elevator and Grain Trade:*—Our business has been reduced considerably recently by a Chicago firm which has sent hundreds of circulars and letters to the farmers of this county. It claims to be a member of the Chicago Board of Trade, a claim which we regret to admit we have found to be true. We cannot understand why it was admitted to membership or why it is permitted to retain it. Of all the irregular methods of obtaining shipments those adopted by this firm take the lead.

We do not expect to suffer permanently from this sort of competition for we firmly believe the farmers will learn the disadvantage they are placed at or tire of placing themselves at the mercy of a stranger, who can give them what he desires for their grain, add charges as he wishes, and leave them without recourse. We inclose one of the firm's circulars headed by a portrait of "The Farmer's Friend." It is as follows:



"The Farmer's Friend."

## Farmers . . . SHIP YOUR Grain and Seeds TO CHICAGO

WHERE THERE IS A BROAD COMPETITIVE MARKET, AND SAVE MIDDLEMAN'S PROFIT, THUS GIVING YOU THE CHICAGO MARKET AT HOME, LESS FREIGHT AND COMMISSION.

There is no reason why farmers should continue hauling their grain to their nearest station, selling it to the grain buyer for whatever he chooses to offer for it, when they can ship it themselves and obtain as much for it as the grain buyer receives.

"It requires more brains, more alertness, to sell a crop judiciously than to raise it."

When shipping to Chicago, farmers give only the legal number of pounds to a bushel, **1. e., 60 lbs. Wheat, 56 lbs. Corn or Rye, 48 lbs. Barley, 32 lbs. Oats, no Dockage**—receive fair weights, state inspection, and get paid for all the grain they raise. The disposal of his grain in a business-like way—thus securing the best price possible—is fully as important to the farmer's prosperity as to raise big crops. Write for full information how to ship.

**NOTE—PATRONS HELP ONE ANOTHER!**—We hope everyone after reading this will send it to a brother farmer, who we trust will do likewise, thus getting it into the hands of a great many people, and that it will do them as much good as it should do you. Will you not help us?

Surely the farmer can gain nothing by shipping his grain to central markets. He has not the facilities for putting it in proper condition to market, and the country buyer will pay nearer the true value of



grain the year around than the city commission man will get. Four years ago we had a similar experience with a Chicago firm which sought to steal our business by inducing the farmers to ship direct. By closely questioning the farmers who shipped to the firm we learned that they usually received more than the market price for the first shipment and were robbed on succeeding shipments to make up for it. We said nothing about our discovery to those who were shipping to the firm, but immediately took advantage of this practice and shipped the grain we were able to buy to this firm in the name of some fellow townsman. We selected a new one for each shipment, so received more than the ruling market price for our grain, and made a very satisfactory profit until Mr. Commissionman got it into his head that he wanted all his money back and more. He was not particular as to whom he got it from. We stopped shipping the first time we suffered loss and sent him a very complimentary letter in the name of our fellow townsman who was nominally the shipper. We thanked him for relieving us from the net of the local robbers and promised to induce other farmers to take advantage of his splendid facilities for securing fair prices. Of course we did not neglect to assure him that henceforth we

### PUBLIC ELEVATOR MEN MAY DEAL IN GRAIN.

The Appellate Court has sustained the decision of the Circuit Court in the certiorari case, which followed the cancellation of the licenses of a number of public warehousemen of Chicago by the State Railroad and Warehouse Commission. The Circuit Court issued a writ of certiorari to bring up the proceedings of the commission for review and to inquire whether the commission had jurisdiction. The case went by appeal by the Railroad and Warehouse Commission to the Appellate Court. Two points were at issue, the jurisdiction of the commission and the question of violation of law in warehousemen being dealers in grain. The decision does not treat of the first point at any great length, but asserts that there is a question as to whether a determination on the part of the commission that certain specified acts were violations of law is conclusive. The treatment of the second point will be of special interest to the trade. The text of the decision on this is as follows:

"Now the specific acts charged against the warehouseman were that he did buy, sell, own, and deal in grain stored in his warehouse and did mix the

be placed at so great a disadvantage in their attempts to secure business. Neither should meet without declaring in favor of such legislation and appointing a committee to work for it. This applies with special force to the Chicago Receivers' and Shippers' Association, and the Illinois Grain Dealers' Association. For at no point have the rights of legitimate traders been so persistently ignored by public warehousemen as at Chicago.

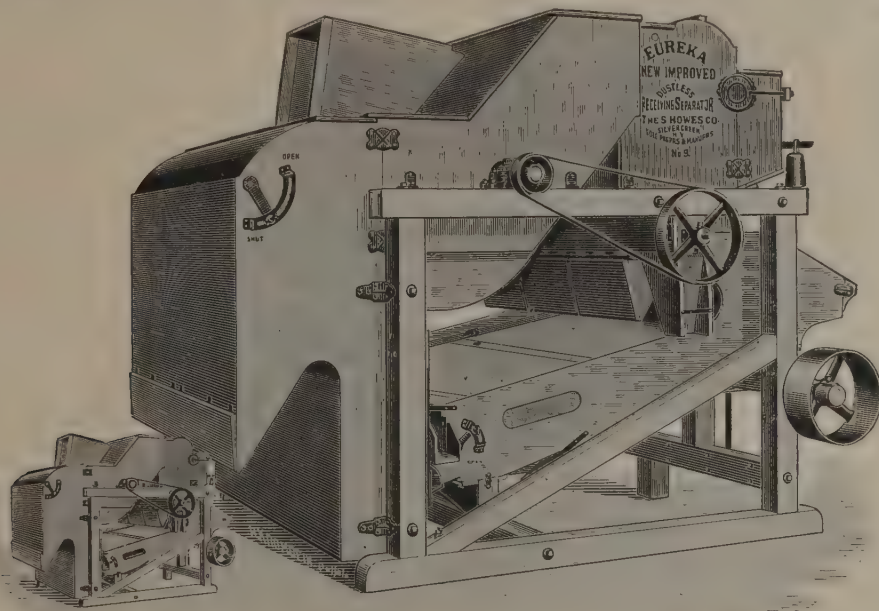
### THE IMPROVED EUREKA DOUBLE RECEIVING SEPARATOR.

As new grain is beginning to move the shrewd elevator man will turn his attention to cleaning grain, and thereby increase his profits. A machine that is designed to meet every requirement of an elevator or warehouse is shown in the accompanying illustration. Improvements have recently been made in the machine, and the manufacturers claim that it is perfectly adaptable to the needs of elevators, and invite rigid examination. In material used and workmanship employed in its construction it is said to be first-class. It can be used in any locality, and is recommended as economical and efficient.

The Eureka Dustless Double Receiving Separator has an automatic feeder. The first separation is made before the grain reaches the first screen, the fan carrying off a large amount of light stuff, chaff, straw, and all the dust in the grain. The material falls on a scalping screen in the second separation, by which it is freed from heavy sticks, straws, headings, or other foreign matter. This is an important preparation of the grain before it passes to the main or separating screen. In the third separation the screened grain passes into a wide separating leg, dropping through a strong air suction which removes much of the shrunken grain, chaff, smut, etc.

The direction of the fan discharge can be changed if desired to suit location. With each machine there are two sets of screens, which are of any fineness or perforation required, and a cockle screen for removing cockle. The latter, like the wheat screen, is interchangeable. The machine may be driven either from the fan shaft or from the shaker shaft, as is most convenient.

The Eureka Separator is manufactured by The S. Howes Co. of Silver Creek, N. Y., who will give any desired information regarding it. It is made in eleven regular sizes, with the wide range of 25 to 4,000 bushels' capacity per hour.



THE IMPROVED EUREKA DOUBLE RECEIVING SEPARATOR.

should ship all our grain to him and sell none to the local dealers. We tried to make him think he had struck the biggest flock of gulls there was to be found anywhere. We succeeded, and he immediately started in to rob all the shippers. We made it a point to get reliable information regarding the sale of every car shipped to him, and soon had ample proof that he was not making correct returns. We published the facts in our local paper, together with letters from farmers who stated what they had lost by shipping to him. This destroyed his standing in our market, and he got no more shipments.

Since then the farmers of this county have not been solicited to ship direct. Those who remember look with regret upon their experience, and are not likely to patronize this new self-styled "friend of the farmers," but the new farmers will learn only by experience that they cannot afford to ignore the local buyer.

If any country dealers who have been suffering from competition of this kind have found a way out of the difficulty we would be pleased to hear of it.

H. & T.

The Board of Trade's investigation shows clearly that the law governing transfers of grain and the issuing of receipts has been violated seriously. No elevator owner could have secured the favors shown to particular owners by the grain department were there no violation of the law. The books in the grain registrar's office show that receipts have been changed without warrant of law. The facts demonstrate that the inspection required by law has not been made.—Chicago Chronicle.

grain owned by him in his warehouse with the grain of other persons stored therein."

The commissioners do not claim that by such acts any statute of this state is violated, but only that public policy is offended; and their brief makes many valuable suggestions as to the modes by which warehousemen may profit at the expense of their customers. Whether such modes are practicable we do not consider, being of the opinion that the legislature meant by the words "any law of this state concerning the business of public warehousemen" only such laws as were laws of this state only by statutes enacted in this state. The appellants do not need, in the discharge of their duties, Coke and Blackstone, Kent and Story, but the Revised Statutes of Illinois. The judgment of the Circuit Court quashing the proceedings of the appellants is affirmed.

The attorneys for the elevator men were elated over the decision, although the case will go to the Supreme Court.

The decision was announced some time ago, and it will be some time before the case is decided by the Supreme Court. It is very likely that a loophole will be left open so the public elevator men will find a way to conduct a private business in a public house. This practice is clearly against the interest of everyone connected with the trade, and no effort should be spared to secure the enactment of a law which will explicitly forbid public elevator men at grain centers dealing in grain. Such restriction would be in the interest of the country shipper because the bailee of his grain at important markets would have no personal interest in any grain in his elevator, and city receivers and shippers would not

### A TRICK OF CHICAGO ELEVATOR MEN.

Patten, next to Hill the most effective of the crusaders on the Board of Trade against the elevator people, proposes to raise the point that the five-day shipping order which elevator people are in the habit of giving shippers when they buy cash grain of them is illegal. Patten says: "We shipped last summer at least 1,500,000 bushels of corn, and yet we did not see a corn receipt in our office all the season. The elevator people simply gave us an order for corn to be shipped within five days. We have to pay for the order as soon as we get it. Yet an insurance authority tells me that in case of fire it might be impossible for the holder of that order to collect the insurance. The companies could raise the point that the only insurable interest belonged to the holders of the receipts, and the elevator man does not part with them. Furthermore, I believe this giving of an order is a violation of the law. The receipts represented by that order certainly do not all run out in five days, and the result is that the warehouseman is collecting more storage than he is entitled to. I shall certainly bring up the point before the directors."

The Canadian Comptroller of Customs has appointed an officer to inquire into the bonding system regarding the transport of goods through Canada from the United States to the seaboard for export to Europe. One feature of the investigation is to inquire into the way such goods are entered in the custom house when arriving in Great Britain.





Emil Honer has sold his brewery at Detroit, Mich.  
Henry Oehm is about to erect a brewery at Brooklyn, N. Y.

Joseph Benjamin and others will erect a brewery at Brooklyn, N. Y.

B. Rengers & Son's new brewery at Chewton, Pa., has been completed.

The National Brewing Co. of Chicago will enlarge its plant to 100,000 barrels.

Jacob Raquet is completing the remodeling of his brewery at Saginaw, Mich.

There is a plan on foot for the erection of a brewery at Newport, R. I.

The Leavy & Britton Brewing Co. of Brooklyn, N. Y., will erect a brewery.

August Harting's new Irving Brewery at Honesdale, Pa., has been completed.

The Renner & Weber Brewing Co. of Mansfield, Ohio, intend to erect a new brewery.

Harry Bowler has completed and is now operating a new brewery at Amsterdam, N. Y.

J. G. Gutknecht & Co. intend to erect an addition to their brewery at Dickson City, Pa.

A receiver has been appointed for the Wagener Brewing Co. at Salt Lake City, Utah.

Louis Sieber, who carried on the brewing business at Marysville, Cal., died recently.

The loss on the Wainwright brewery at St. Louis in the recent cyclone is estimated at \$25,000.

The Castle Brewing Co. has been incorporated at Chicago, Ill., with a capital stock of \$400,000.

Franz Bros. have leased M. Schmich & Co.'s brewery at Freeport, Ill., and are now operating it.

The Dubuque Malting Co. has commenced the operation of its new brewery at Dubuque, Iowa.

The Phoenix Brewing Co. has been incorporated at Chicago, Ill., with a capital stock of \$350,000.

Louis Sieber's brewery at Maryville, Cal., has been enlarged and improved, and is now running again.

N. Gehler and P. Book have about completed the erection of their malting plant at Kendrick, Idaho.

The Chicago Brewing Co. will erect an addition to its brewery at Chicago, Ill., at a cost of \$10,000.

Louis Leideger of Milwaukee has purchased the Geo. Ruder Brewing Co.'s brewery at Merrill, Wis.

A company with a capital of \$60,000 has been organized at Springfield, Mo., to erect a brewery, etc.

Extensive additions are to be made to the large plant of the W. D. Matthews Malting Co. at Le Roy, N. Y.

The New Athens Brewery Co. has increased the capacity of its plant at New Athens, Ill., to 10,000 barrels.

The Terre Haute Brewing Co. of Terre Haute, Ind., contemplates increasing the capacity of its brewery.

The Centralia Brewing and Ice Mfg. Co. has been incorporated at Centralia, Ill., with a capital stock of \$50,000.

Kamm & Schellinger are completing improvements to their brewery at Mishawaka, Ind. A story has been added to the brew house and new machinery will be put in.

The L. Rosenheimer Malt and Grain Co. of Kewaskum, Wis., held its annual meeting recently, at which the following officers were elected: Moritz Rosenheimer, president; Adolph Rosenheimer, sec-

retary and treasurer; David Rosenheimer, assistant secretary and treasurer.

D. Lutz & Sons' brewery at Allegheny, Pa., was recently damaged by fire to the extent of \$50,000; fully insured.

The Germania Brewery at Pueblo, Mexico, is to be increased in capacity, and a malt factory and other additions erected.

The Sebewaing Brewing Co.'s brewery at Sebewaing, Mich., was destroyed by fire recently. It was partially insured.

The Anheuser-Busch Brewing Co.'s property at St. Louis was damaged to the extent of \$10,000 in the cyclone of May 27.

The J. D. Iler Brewing Co. has been incorporated at Kansas City, Mo., with a capital stock of \$200,000, by J. D. Iler and others.

Fred Koch's brewery at Dunkirk, N. Y., was recently destroyed by fire. It was insured for \$20,000. It will be immediately rebuilt.

It is reported that a syndicate headed by Wm. Gundel of New York City will erect a brewery at Carlstadt, N. J., at a cost of \$50,000.

The American Brewing and Ice Co. has been incorporated at Central City, W. Va., with capital stock of \$75,000. A brewery will be erected.

Louis and Charles Mueller of Toledo, Ohio, have purchased the plant of the Owosso Brewing Co., Owosso, Mich., and will continue the business.

The Brewers' National Association held its annual meeting at Philadelphia, Pa., June 3 and 4. It was decided to hold the next annual meeting at Buffalo.

The Montgomery Brewing Co. has been incorporated at Montgomery, Ala., with a capital stock of \$50,000. The organizers have purchased the brewery operated by the former company of the same name.

It was expected to have the Schwartzbach Brewing Co.'s brewery at Hornellsville, N. Y., in operation by June 1, but a fire recently occurred, doing damage amounting to \$1,000, which will delay the opening to the latter part of June.

The Boylston plant of the New England Brewing Co. at Boston, Mass., was damaged by fire on the morning of June 5 to the extent of \$75,000. There was \$17,000 insurance on the buildings and machinery, and \$86,000 on the stock.

The litigation involving the Spring Brewing Company of Waukesha, Wis., which has occupied considerable of the time of the United States Court since receivership proceedings were begun, a year or more ago, reached a climax May 18, when Judge Seaman issued an order for the sale of the brewery as soon as the receiver thinks fit.

Albert Schwill & Co., maltsters of Cincinnati and Chicago, will build an extension to their new malt house at Chicago, which will enable them to add thirty more drums and another drying kiln, making in all sixty drums, each of 250 bushels' capacity. They will continue malting all through the summer, and expect to have the addition to the malt house finished by October.

According to the last report of the Bureau of Statistics barley malt aggregating 720 bushels, valued at \$503, was imported in April, against 850 bushels, valued at \$780, imported in April, 1895; and during the ten months ending with April 4,522 bushels, valued at \$3,910, were imported, against 9,247 bushels, valued at \$5,877, imported in the same time in 1894-95. Of imported barley malt we exported none

in April, 1896, or 1895, none in the ten months ending with April, and 5,259 bushels, valued at \$225, were exported in the ten months ending with April 1, 1895.

Frank Rademacher of Los Angeles, Cal., has patented an oil burning malt kiln, assigning one-half to Joseph Maier and George Zobelein of the same place. It is No. 561,518, and was filed Dec. 12, 1895. The invention consists of the combination of a furnace made substantially circular in horizontal cross-sections and suitable malt-drying chambers. A circular conduit extends around the furnace. At one end of the conduit is means for creating heat, and at the other end a discharge stack. A series of ports and flues carry heat from a large air chamber to the malt-drying chambers.

## DOTS . AND . DASHES

Have your cars well coopered before loading.

Kentucky farmers are reported to be investigating Kafir corn and the practicability of growing it in that state.

A feature of the export business of New York City is quite numerous shipments to South Africa of wheat and corn.

Grain bags manufactured at the Penitentiary at Walla Walla, Wash., have been reduced in price from \$49 to \$46 per 1,000.

The Indiana crop report is not issued by the State Bureau of Agriculture as in other states, but by the Agricultural Department of the De Pauw University.

The Ohio agriculture department officials came out with their monthly denial that their crop report on wheat had not been made up, while the trade had the usual pointers on it.

The Missouri Agricultural College has received a diploma from the World's Columbian Exposition for the best and most extensive collective exhibit of wheats, and a medal for its exhibit of leaf tobacco.

A new record was made in the price of beans at Chicago, May 26, hand-picked pea beans selling at 86 cents per bushel, the lowest price known in the trade. On the same date in 1895 they were \$1.90, in 1894 \$1.85, in 1893 \$2, in 1892 \$1.65.

Henke & Pillott of Houston, Texas, received May 25 the first car of oats of the new Texas crop. The oats came from Temple, and are claimed to be the finest specimen of the grain ever grown in the state. They graded choice No. 2, rust proof.

Merchants and millers who planned to use old wheat until late in July now realize that much new wheat is likely to be available before the end of June, and, consequently, they are anxious to get rid of the surplus they are carrying before the new crop comes in.

As the time has come for new grain to commence to move, we wish to call the attention of country shippers to the fact that a little extra care in cleaning will be profitable. Every grain man should have the proper machines to do this work and save freight on the dirt.

Peter Jolly has brought suit against the State Elevator Company of Minneapolis for \$10,000 damages for injuries received to his arm last October by falling from a ladder. He says he was ordered to ascend a ladder in the company's elevator to adjust a belt, and that on account of that part of the building being without light and the ladder improperly placed, he fell.

Chicago has an unsophisticated judge. He is reported as saying that the difference between a Board of Trade and bucket shop is that one is wholesale and the other retail. The Chicago Board should start a kindergarten and invite the learned judge to attend. He might learn the difference between a contract for actual delivery and a mere bet on the price. Boards of Trade handle hundreds of millions of actual grain annually; they move the crops and bring the producer and consumer together. Every trade made there provides for the actual delivery, but none is expected in a bucket shop, where it is merely a game of "freeze out."—From King's Circular.



## QUERIES: AND: REPLIES

[Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.]

### No. 24. Cannot Elude Liability by Contract.

On page 418 of the May issue of the "American Elevator and Grain Trade" is an item to the effect that the courts have decided that no elevator man who leases land from a rail carrier can legally release that carrier from liability for damages caused to his elevator by sparks from a passing locomotive. I would like to learn the particulars of any decisions in this line. The railroads here require us to release them, and the insurance companies charge us \$5 per \$1,000 extra premium for releasing them. If our releasing them is not valid insurance companies should not charge extra for it. The insurance companies claim that the only decisions in this state lean to the reverse of those mentioned in the "American Elevator and Grain Trade."—E. S. GREELEAF, Jacksonville, Ill. [Ans.—In regard to obligations that railroads cannot evade by contract the Supreme Court

denied the validity of the lease, claiming it was void as against public policy in that it undertook to protect the railroad against its own negligent act. The lower court held the lease valid, but the Supreme Court holds it void.—Ed.]

### IMPROVED GAS AND GASOLINE ENGINE.

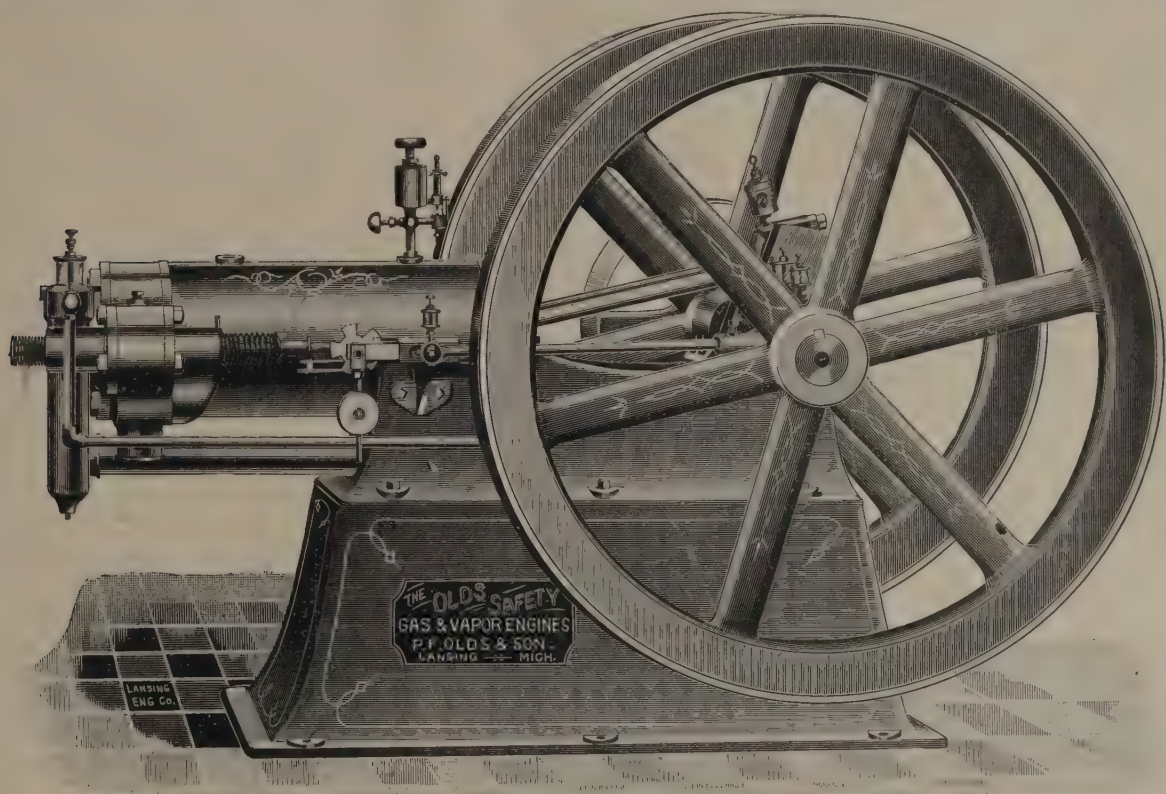
The development of the gas engine since the Centennial Exhibition of 1876 is not less remarkable than the development of the steam engine in its earlier days. Improvements in gas and gasoline engines have succeeded each other with great rapidity, until this type of motor seems to have almost reached perfection. We give an engraving of an engine of recent design made by P. F. Olds & Son of Lansing, Mich., which is refined in both principle and construction. While the makers of this engine have adopted the four-cycle system, which is said to be the most economical system of operation for gas engines, they have avoided all the complicated mechanism for securing the valve motions, and

itself. The engine is made in two forms, horizontal and vertical, and is adapted to launches, which are also furnished by this firm.

As the engine is perfectly automatic and absolutely safe it recommends itself particularly to elevator men and millers desiring a power requiring no attention after starting and operating on less than one gallon of gasoline per day of ten hours per horse power.

### CAR SERVICE RULES FOR KANSAS CITY.

The recently adopted agreement of the Kansas City Car Service Association went into effect June 8. Every Kansas City railroad except the Chicago & Alton and the Chicago Great Western signed the agreement. One of its rules limits the time allowed for loading and unloading cars to forty-eight hours. On all cars placed during the forenoon, after 7 o'clock, time will be computed from 12 o'clock noon of that day. On all cars placed after 12 o'clock, noon, to and including 7 a. m. of the following date,



IMPROVED GAS AND GASOLINE ENGINE.

of Iowa decided, in the case of Griswold vs. Illinois Central R. R. Co. (53 N. W. Rep. 295), as follows: "Railway corporations partake of the nature of public agencies, and perform a public duty. They are agencies created by the state with certain privileges, and subject to certain obligations. Among the obligations imposed upon them is that of using reasonable diligence in furnishing their roads with safe equipments, including locomotives, engines, and of operating their roads without negligence. Agreements by which railway corporations undertake, without the consent of the state, to relieve themselves of a burden which is imposed upon them by law, are void, as against public policy. Moreover they cannot, by contract, exempt themselves from responsibility for their own or their servants' negligence in the carriage of goods or passengers for hire." The facts in the case under which the decision was made were: H. J. Griswold owned an elevator on ground owned by the railroad, and held by him under lease, in which he had agreed with the railroad that it should not be liable for damage by fire caused through its negligence. The elevator was destroyed by fire started by sparks from a passing engine. The insurance companies paid assured, and being subrogated sued the railroad for the amounts so paid. The railroad set up its exemption under the lease, but the insurance companies

have devised a new and very simple movement that accomplishes all that can be done by cams, lateral shafts and gearing, besides insuring the prompt opening and closing of the valves. This motion is secured by a plain eccentric on the main shaft, which reciprocates the alternating wheel operating the exhaust and compression valve. By throwing out the pawl which operates the alternating wheel, compression will be omitted and the engine can be turned to any point without the resistance of compression.

When gasoline is used as a source of power, the liquid is supplied to the engine from a tank located outside the building containing the engine, or, in case of small engines, the tank is located in the engine base, and by a simple device the gasoline is supplied to the engine as needed. Any surplus flows back to the tank.

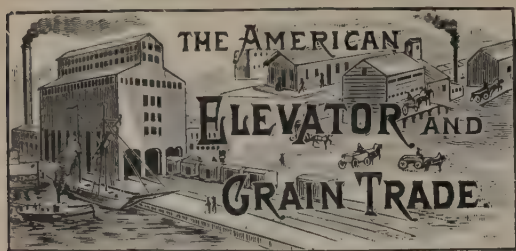
The engine is arranged to use either an electric or hot tube igniter, the latter being constructed on an improved principle. Everything connected with the engine is arranged with a view to perfect safety. A very sensitive governor is employed which maintains a close regulation. The engine is nicely balanced, has large valve openings, ample bearings, straight line connections, and embodies all the improvements suggested by years of use of gas engines of various kinds, besides containing new features peculiar to

time will be computed from 7 a. m. of that following day.

Receivers and shippers have been allowed all the way from seventy-two hours to thirty days in which to unload cars and as a result the cars have frequently been used as warehouses, from which the shipments were sold in parcels. Under the new rules a charge of \$1 a day for each car will be exacted by the Association after the time limit has expired. If the charges are not paid the Association may send the shipments to public storage houses or yards, when they will be held subject to storage charges in addition to the accrued car service charges.—Kansas City Star.

Naturally those who have not been in the habit of paying demurrage are bitterly opposed to the inauguration of this new plan to bleed them. It seems that heretofore they have been given ample time to unload and the one-sided demurrage charge falls with unusual weight upon them. This unjust charge has been forced upon one city after another until now few are exempt from an exaction the traffic managers are pleased to call a charge for the purpose of expediting the transportation of freight. When the shipping public overcomes the lethargy which controls them it may think of the rank injustice of the jug-handled demurrage charge and demand that it be made reciprocal or abolished.





PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

## MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Howland Block, 184 and 186 Dearborn St.,  
CHICAGO, ILL.

A. J. MITCHELL, - - - Business Manager  
HARLEY B. MITCHELL, - - - Editor.  
CHARLES S. CLARK, - - - Assistant Editor.

Subscription Price, - - - \$1.00 per Year.  
English and Foreign Subscription, - - 1.50 " "

### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JUNE 15, 1896.

Congress has adjourned without passing the bill providing for the enforced use of the metric system, the uniform classification of grain, the uniform classification of freight or any bill in which the grain trade was directly interested.

If any of our readers are wearing one of the "don't kick" buttons, we beg that they will present it to the local station agent and get a big one bearing the words "always kick." With the latter motto always before them, they may be able to keep out of bankruptcy.

Off the floor of the Board, members often laugh at some of the infinitesimal facts that influence prices. A carload of new wheat arrived in St. Louis on June 10, and this was actually a bear factor in Chicago. The only possible significance of the event was that a new crop is upon us, something of which everyone is well aware.

All commission men are not honest, but few of the central markets seem to have been afflicted recently with many dishonest ones. If they have been detected their trickery has not been made public. The markets at the head of Lake Superior seem to have suffered more than any other recently, but the publicity given to the tricksters will surely cut short their business life.

A correspondent of The Miller, of London, Eng., proposes a modification of the recently exploited scheme of building a series of national granaries for England, as a means of defense in case of a protracted war. He thinks that a better plan would be to advance money for small country elevators at suitable places. He argues that this would be a great convenience to the farmer and encourage the growing of wheat,

especially if supplemented by a system of negotiable warehouse receipts. He thinks the elevator system in this country and Canada a great thing for the farmer.

Some more waterway cheap transportation enthusiasts have applied to the Federal Government for permission to spend a few of its millions in constructing a much needed trench around the Niagara Falls, and to the Atlantic Ocean, so that the dear people can ship their products right out of the country for a pittance. Their extreme enthusiasm in this matter can be accounted for only by the depth of their empty pockets.

The Chicago Sugar Refinery, which caused the Chicago receivers and the Illinois Grain Dealers' Association so much trouble in the matter of shortages and public weights last winter, is attempting to ignore the trade, which forced it to accept the services of disinterested weighmen, and to buy direct from the country shipper. If the shippers experience as much trouble in doing business with the Refinery as the local receivers have, they will not sell direct very long.

Two hay warehouses are reported destroyed at Kansas City, each from a separate fire, and the origin of the fire in both cases is said to be spontaneous combustion. While this is a favorite way of accounting for mysterious fires, and spontaneous combustion is charged with perhaps double the account that it should be, nevertheless, it must be remembered that such fires are possible and that hay has been known, in many cases, to heat from dampness, to the extent of taking fire. The danger need not be exaggerated, but it is just as well to remember that it is a real and not a fanciful hazard, and to guard against it accordingly.

The grain storage elevator of the future may be fireproof. Several prominent elevator builders have recently given much study to reducing the fire hazard, and henceforth this feature will receive considerable attention from all elevator men, as well as builders. In the past a few owners of large storage elevators have made some slight attempts to reduce the fire hazard by providing apparatus for extinguishing fires, but after providing it have made no effort to keep it in working order. Rotten hose, a broken pump, empty water barrels or an empty sprinkler supply tank increases instead of diminishing the fire risk. The owners depend upon them in vain.

The lightning, along with the wind, has been putting in some very effective work on elevators during the stormy period of the past month. The curious partiality of the lightning for anything containing hay or grain has often been noticed. Thus, three times as many barns are struck as houses. The ordinary explanation, that country barns are isolated, will hardly answer, as houses out in the country are also "isolated." The liability of elevators and mills may be explained by their usually prominent character. Metal-covered buildings are said to be free from danger from lightning. If this be true, and it probably is, another argument is furnished for ironclad warehouses.

### MISSOURI GRADES LET DOWN.

The Missouri State Board of Railroad and Warehouse Commissioners seems to be decidedly fickle-minded. Last month we were pleased to announce that it had raised the test weight of No. 2 hard winter wheat to 60 pounds and of No. 3 to 57 pounds per bushel, but now we regret to state that action has been rescinded and 59 and 56 pounds will be the standard as heretofore, so no change will be made in these grades July 1 as was contemplated.

The old standards seem to be in favor with the wheat mixers, and the board thought it would be better for the trade to have the Missouri test weight conform with that of Kansas. Uniform rules and classifications of like grain by different inspection departments is always desirable, as it simplifies the business and prevents the confusion caused by a variety of grades in a market, but in this case it seems that the tail is wagging the dog, despite the persistent petitioning for the establishment and maintenance of higher grades.

The Missouri department has had more trouble with grades and inspectors since its organization than all other state departments, but doubtless it will come out for the rigid maintenance of grades as high as in other important markets after it has finished experimenting.

### WORK FOR THE ILLINOIS ASSOCIATION.

The Illinois Grain Dealers' Association, which is the oldest and strongest of the organizations in this trade, will hold its annual meeting June 23, and no doubt the meeting will be well attended, as the Association has done much for its members in the past and now it is better prepared than ever before to take up the common cause of those connected with the trade and make an aggressive fight for right.

The Association has a number of active, able workers who are not easily discouraged in conducting any work allotted to them. It was this Association that came so near to securing an equitable settlement of that old and just claim of country elevator men for recompense for providing a freight house and facilities for loading bulk freight and for the work of loading it. The fight for pay for this service was never conducted vigorously, as the Association's lawyer advised against taking the matter into the courts, the leaders were so completely engrossed in other work that they did not seek to secure justice by other means. Every rail carrier's charter clearly states that it shall provide freight depots for all kinds of freight. Grain is not excepted; hence, if any carrier does not wish to provide such a depot, it should pay the elevator man for providing it. Many of them did so before the Interstate Commerce Law went into effect, by giving the elevator man a rebate on all grain loaded from his house and none of them can now deny the justice of such recompense. A monthly salary, based upon the amount of grain loaded into cars during the month, would be equitable and fair. A special committee should be placed in charge of this work with instructions and power to act.

The Association has done much toward ridding the trade of irregular dealers and could, with profit to its members, devote some atten-



tion to tricky jobbers, commission men and buyers who do not live up to their contracts. A blacklist, if kept up to date, would prove a valuable feature of the Association's work.

Its committee on legislation should insure the employment of disinterested weighmen in all public elevators at grain centers, by securing the enactment of a state law to that effect. A law requiring carriers to pay demurrage for unreasonable delay at initial points or in transit would also remove one great injustice which is now forced upon shippers and receivers. The lop-sided demurrage charge should be made reciprocal or abolished. An effort should also be made to provide some protection for the regular grain buyer, who is imposed upon by the unscrupulous tenant, against whose grain the landlord holds a lien. A number of Illinois grain buyers have been called upon to pay for grain a second time on account of the present law, and more will be if a change is not made.

There are numerous opportunities for the Association to advance the interests of members, and unless its officers take advantage of those offered and thereby show their appreciation of the support given, they must expect to lose members. An association, to be a success, must be progressive, aggressive and constantly at work in the interests of its members, otherwise lethargy, inactivity and dismemberment will follow quickly on the heels of one another.

### CHARGES ON EXPORT GRAIN.

Boston, Baltimore and Philadelphia have reduced the storage charges on grain, but Buffalo and New York still maintain the extortionate rates of old. Buffalo elevator men cannot be expected to reduce the transfer fee until competitors of the pool arise who cannot be bought. The state has enacted a law providing for a reasonable charge, but this has been and will be ignored. The elevator men of New York City have been kicking vigorously for a reduction in the freight rates and differential on grain to that city, but in vain. They overlooked their own exactions and placed the entire blame for the decadence of the city's grain trade on the rail carriers. The carriers, after making a slight reduction in rates from Buffalo, did not hesitate to call attention to the exorbitant charges levied upon grain in New York harbor, but no reduction was made. The New York elevator men have always been so very avaricious as to prevent the natural growth of the city's grain trade and the other Atlantic ports have profited accordingly.

Not only are the old competitors making renewed efforts to secure a larger portion of the export grain trade, but new ones are about to enter the race. Mobile, Charleston, Port Royal, Port Huron, Texas and Portsmouth, Va., and one or two other Southern ports are anxious to secure a part of the trade. Newport News may soon have a large new elevator and Portland, Me., will have a large one to handle the grain taken east by the Grand Trunk, a road which has always distinguished itself from the others by treating grain shippers with great consideration and fairness. That it will carry much export grain to Portland no one who is familiar with its past record can doubt.

The St. Lawrence route for export grain may

also be expected to grow in favor henceforth, as the carriers and handlers en route are beginning to recognize the fact that unless they provide the needed facilities for handling the trade they will get no American grain and their own export grain will go out via American ports.

The outcome of the competition will be that New York will be compelled to reduce its charges. As soon as the 2,000,000-bushel steel storage elevator in South Brooklyn has been completed a cut in rates and charges may be expected and this may lead to the needed reduction in charges. If a reduction is not brought about the city's export grain trade will surely continue to decline. Competition in foreign markets with grain from other countries makes it necessary that the carrying and handling charges on our grain be reduced to a minimum.

### THE ARMOUR ELEVATOR TROUBLE.

The trial of the members and manager of the Armour Elevator Co., who were charged with illegally transferring grain from one house to another and with changing the dates of warehouse receipts, so that the traders would be forced to pay one-fourth of a cent more than they ought to pay, brought to light some loose practices on the part of the Warehouse Registrar.

The elevators where the company was charged with indulging in irregular practices were all public houses. They are located on Goose Island and are operated as one plant, being run by one superintendent and supplied with power from one plant. A and B were built at the same time, and in reality constitute one big elevator, with a fire wall built up through the middle. They are connected by belt conveyors and doorways through the fire wall. The fire risk in each is the same, so there seems to be no excuse for designating the parts as separate elevators. But the elevator B annex is a crib built on the ground and covered with iron. It receives grain from cars on track, but most of that handled in it comes in through a conveyor gallery from the other elevators. As a fire risk it is not likely to be considered equal to the others. If it is the desire of the elevator company to operate the entire plant as one house, it is not likely to be objected to by any but the insurance companies. It could be licensed as one plant, then the trade would have no objection to the transfer of grain from a bin in one part of the plant to a bin in another part. A transfer of this kind is frequently made in all large elevators, and not considered a crime. The law provides that the public elevator man shall exercise proper care to prevent the grain being damaged, hence he sometimes finds it necessary to transfer grain from one bin to another.

When grain is delivered from any elevator the receipt must be canceled and the grain inspected, and if the grain is then taken to another elevator, a new receipt must be issued. The Illinois law also provides, that: "In case it be desirable to consolidate two or more receipts into one and the warehouseman consent thereto, the original receipts shall be canceled, and the new receipts shall express on their face that it is a consolidation of other receipts; the numbers

of the original receipts shall appear upon the new ones, but no consolidation of receipts of dates differing more than ten days shall be permitted and all new receipts issued for old ones canceled shall bear the same dates as those originally issued."

It would appear from this that both the elevator company, the inspector and the registrar were culpable, but only the first is amenable to the Board of Trade and in its case the manager of the company was suspended from the Board for twenty years. The sentence is very severe and may be materially reduced. The other branches of Chicago's grain trade have had so much trouble with the elevator men during recent years that whenever one is found guilty of uncommercial conduct he can confidently expect to be handled without gloves.

The trial and decision will surely have a good effect upon the trade, as dealers will have a clearer idea of their rights, and the others will be more careful in doing their duty. The elevator men have not exerted themselves in considering the rights of those whose grain they had in charge.

### FALLING OF COUNTRY ELEVATORS.

Since the establishment of this journal fourteen years ago it has never been our lot to announce the falling of so many country elevators as is reported under the head of "Casualties" in this number. Seldom do any fall at this time of the year, as they are generally carrying light loads, or are cleaned out for repairs and preparation for receiving the new crop. The heavy rains, followed by the settling of poorly constructed foundations, has caused several of the elevators to fall, and the others are due to the overloading of houses which were built without due consideration of the strains to which they would be subjected and the weight they would have to carry.

In recent months several houses have fallen on the owners and operatives and either maimed or killed them. It is to be regretted that the barn builders who stick these cheap boxes together are not oftener caught in their own death traps, so that the erection of weak houses would be stopped.

Elevator men as a rule seem to give very little consideration to the necessity of having a strongly built house and thoughtlessly load any elevator as long as room remains, often with dire results. A properly constructed house will hold such a load, but if the builders do not study and provide for all the different strains to which the elevator will be subjected the slaughter of the innocents may be expected to continue.

A new scale has been placed on the market for which wonderful things have been promised and we doubt not the errors in weights will be on a wonderful plan. It is said this scale will weigh and record the weights of loaded cars as they pass over it, and this, too, without uncoupling the cars or even stopping on the scale platform. A good guesser would come as near to arriving at the correct weight of the car's contents, could be moved about and sworn at when weights returned were too far out of the way for the grain shipper to accept without a protest.



# EDITORIAL MENTION

Our columns are open for the discussion of any trade subject.

Crop reports and news items are always welcome. Let us hear from you.

Every car should be well cleaned and coopered before any grain is put in it.

Demurrage should be made reciprocal or the present lopsided charge abolished.

If rail carriers would furnish steel tanks for transporting bulk grain in, the loss from shortages would be materially reduced.

When shippers refuse to accept any but a clean bill of lading they will stand some show of getting that to which they are rightfully entitled.

The grain trade is sorely in need of a well-managed, aggressive national association. Who will take the lead in the active work of securing it?

Shippers should not forget how badly they need a law providing for the uniform classification of freight when their Congressman comes home.

Ohio grain dealers cannot afford to forget House Bill 867, nor to lose any opportunity to solicit the support of every member of the state legislature for it.

Every regular grain dealer of Illinois should attend the eleventh annual convention of the Illinois Grain Dealers' Association at Decatur, Tuesday, June 16. All will be welcome.

Shortages in grain shipments will continue to absorb the shipper's legitimate profits and part of his working capital, until all join hands and stand firm for the delivery, at destination, of all grain placed in every car.

A bill is said to be pending in the Louisiana State Legislature which will forbid any but farmers selling staple articles for future delivery. Such a law would not be constitutional, so the trade has naught to fear from it.

The grain trade will never obtain relief from the innumerable abuses which encumber it until strong national and district associations are organized and aggressive officers of ability placed in charge of them. Combined and persistent effort alone will bring relief.

The elevator men who are now paying rent for the site upon which they have erected, with their own money, a depot for receiving and loading bulk grain into cars, should shut down and demand that carriers pay them for every bushel loaded or provide facilities for receiving and loading. It is folly for elevator men to expect to make a living by helping the railroads to

conduct their business, and that, too, without compensation.

The state authorities are still after the bucket shop keepers of Kansas City, but so far have not succeeded in closing them. Some of the justices seem to be so entangled in the cobwebs of prejudice that they cannot distinguish the difference between betting on the market and legitimate speculation.

The shipper who accepts old, worn out cars for his grain can confidently expect to have a shortage at destination. Shippers can insist upon having good cars, delivered in good condition. A few photographs of cars, followed by a law suit, would make the carrier very careful and more considerate of the shippers' interest.

If the government report is right and conditions continue favorable, the oats harvest will be in the neighborhood of 850,000,000 bushels. That is a crop to point to. It would fill a train of cars over 5,000 miles long. Most of our states would not have track room to hold the cars containing the crop, if every mile of railroad track were utilized.

The project of erecting an elevator at Galveston, Texas, with money raised in Kansas, has provoked sarcastic comment in some quarters, especially the proposition to secure the money advanced by the Kansans by first mortgage liens. One indignant Jayhawker wants to know why the people who have the gumption to raise the money cannot build and manage the elevator themselves. And the question does seem to be to the point.

The courts of different states have decided that rail carriers must load carefully all freight presented for shipment over its road. If grain shippers would insist upon the carriers providing facilities in their freight houses and men to handle and load their grain, the carriers might come to their senses and offer to pay elevator men for the use of their houses and for loading grain into cars, instead of charging them for the use of ground.

The Ohio Grain Dealers' Association held its annual excursion and meeting as usual early this month. The excursion included a trip to Star Island via Detroit. The fishing is said to be good there, but we have not heard of the grain dealers catching any fish. They always have a good time and transact the business necessary to keep the Association alive. It is more of a social than a business organization, but it has a large membership and is prepared to fight when crowded.

If anyone has discovered what Senator Sherman is aiming to secure by his bill providing for a uniform standard of classification and grading of grain, he would confer a great favor upon a perplexed public by disclosing it. The bill provides that the Secretary of Agriculture shall fix such classification and grading of grain as in his judgment the usages of trade warrant and permit, and as will best subserve the interest of the public in the conduct of interstate trade. These grades shall be known as United States standard, and any who choose may use them. Thirty days after the grades are fixed they shall

be taken to be the standard in all interstate trade in grain, in all cases where no other standard is agreed upon and the parties to the transaction do not object.

Every grain dealers' association should keep a suspect list to protect its members from the trickery and dishonesty of shippers and receivers who are detected indulging in sharp practice. Such a list has been the means of saving thousands of dollars to the members of other trade organizations and surely would do as much for grain dealers.

The Grain Dealers' Association of Northwest Iowa has gained the first point against the railroads in its suits to recover overcharges. The St. Paul asked for a dismissal of the suit because it was not an Iowa corporation. The court has refused on the ground that the suit is brought under the Interstate Commerce law, hence the road may be sued anywhere where service can be secured on the defendant. The rail carriers seem to be determined to fight the suits obstinately and will use all kinds of trickery to break up the prosecution, so the members of the Association have need of keeping their wits about them and sticking close together.

According to the report of the Bureau of Statistics breadstuffs valued at \$10,330,251 were exported in May, against an amount valued at \$11,809,722 exported in May, 1895; and for the eleven months ending May the valuation was \$122,289,028, against \$101,144,603 for the same time of 1894-95. Exports of grain in May, compared with those of May, 1895, in bushels, were as follows: Wheat, 4,139,430 against 6,862,216; rye, 192,533, none in May, 1895; oats, 2,638,803 against 64,183; corn, 7,690,740 against 4,262,891; barley, 915,911 against 32,541. The exports for the eleven months ending May were: Wheat, 54,108,440 against 71,297,694; rye, 592,200 against 8,879; oats, 8,267,703 against 504,383; corn, 84,993,603 against 22,533,225; barley, 6,541,660 against 1,450,450. In the same eleven months were exported 13,482,622 against 13,870,322 barrels of flour, 36,071,718 against 18,200,174 barrels of cornmeal, during the same 305,337 pounds of oatmeal, 252,896 against time of 1894-95.

If people always saw to it that their insurance policies covered everything intended to be covered, a great deal of costly litigation would be unnecessary. It is true that the courts almost invariably construe policies, in case of doubt, in favor of the insured and against the companies, but this does not save the litigation from being both vexatious and costly. A policy was issued by an insurance company, covering a "barn and the grain therein." The property burned and it was discovered by the company that some of the "grain" was millet hay. Payment was resisted, but the court instructed the jury to consider the millet hay as "grain" under the policy. This the Supreme Court sustained. Now, undoubtedly, the failure to have the hay mentioned in the policy was simply oversight. Had the policy read "barn and the grain, hay and seeds therein," it would have covered everything ordinarily stored in a barn for feed. See that the terms of the policy are wide enough to cover your property.



## ...Points and Figures...

Attend the annual meeting of the Illinois Grain Dealers' Association at Decatur, Tuesday, June 23. All regular dealers are welcome.

C. L. Pomeroy, a farmer near Moorhead, Minn., has received a first prize diploma and medal for wheat exhibited at the World's Fair.

Wm. H. Donnell, of the Haven Mill & Elevator Co., Haven, Kan., writes us that his company has no complaint to make against the Kansas City grain inspection, considering it rigid enough as it is.

Do not forget that you will be welcome to attend the annual meeting of the Illinois Grain Dealers' Association, which will be held at Decatur, June 23. Every regular dealer should be present and help along the good work.

The grain receivers and shippers of Chicago are formulating a method for securing a readjustment of freight rates to Chicago from the West and through to the seaboard. It is said that an attempt will be made to take Chicago business away from roads which persist in practicing discrimination.

Have you ever used Davis' Grain Tables in buying grain? This book contains 219 pages of tables; it saves work and time, and reduces the liability of error in the computation of the value of grain received. It will be sent, together with the "American Elevator and Grain Trade" for one year, for \$1.50.

Geo. R. French & Co., commission merchants of Chicago, are accused of doing a bucket shop business. Geo. W. Rumble, a former employe, says the firm was doing business on bucket shop principles while making it appear to customers that it was dealing on the Board; but Mr. French claims that Mr. Rumble made the deals without the knowledge of the firm. Mr. French was suspended from the Board for one year.

C. B. De Long and Henley Eversole have erected new elevators at Fithian, Ill. Both are equipped with No. 3 Cornwall Cleaners and No. 3 Victor Shell-ers. An Eagle Engine, formerly used in his old elevator, furnishes power for De Long's new house, all else being new. Mr. Eversole has a 20-horse power center crank Atlas Engine. The combined capacity of the elevators is 50,000 bushels. All the machinery was furnished by The E. H. Pease Mfg. Co.

The arbitration committee of the Chicago Board of Trade has decided that on this market "hand-picked beans" means pea beans. This was decided in the case of Albert B. Brown & Co. of Grand Rapids, Mich., vs. John H. Leslie of Chicago. Brown & Co. asked Mr. Leslie for a bid on "hand-picked beans," and the latter made an offer which was accepted. When the beans arrived some of them proved to be "hand-picked mediums," and the receiver claimed they should have been all pea beans, which was upheld by the Arbitration Committee.

Western merchants and Western State Railroad Commissions would be justified in starting a very vigorous campaign for a reduction in freight rates on farm products now. Everything the farmer is raising is selling at an almost unprecedentedly low price, and aside from the railroads no one is making any money out of the agricultural industry. Even the railroads, it must be confessed, are not rolling in prosperity. But the Western railroads are getting about as much out of each ton of freight of this sort carried as they have gotten any time in the past ten years, and it would be no injustice to them to be compelled to make emergency low rates, to last as long as the prevailing low prices shall last.—Kansas City Star.

The managers of the Joint Traffic Association have adopted the following rule, governing allowances of transfers of grain: "Resolved, That the clause of freight circular No. 165, requiring that the identity of grain be preserved, is hereby so modified that, when grain is, for any of the reasons specified in said circular, transferred through elevators at points at and west of the western terminal of the trunk lines where grain is graded under due public authority, it will be permissible to transfer and re-

ceive the same quantity of grain of like grade, provided the conditions of said circular are complied with in all other respects." The buyer should have something to say as to whether other grain shall be substituted for his in transit. There is no necessity for such substitution and the owner of the grain frequently suffers loss by it.

## Trade Notes

Lives of rich men oft remind us  
We can make our pile sometime,  
And by advertising largely  
Is the way to get in line.

Frank Beery of Marion, Ohio, has purchased an interest in the firm of Layton, Beery & Co. manufacturers of feed mills, etc., at Upper Sandusky, to which place he removed June 1.

Moore & Lorenz of Chicago have added a considerable amount of floor space to their shops in order to take care of their growing business. They report that they have been crowded with orders for some time.

The Thornburgh & Creel Co. has been incorporated at Chicago, Ill., with a capital stock of \$20,000, to manufacture mill and elevator supplies. The incorporators are O. H. Creel, Henry A. Tilton and G. L. Hume.

Joseph Reid, manufacturer of the Reid Gas Engine, is building a new foundry as an addition to his plant at Oil City, Pa. The machine shop will be enlarged, so that Mr. Reid will be able to double the output of engines.

Lyman Smith of the Smith Pneumatic Transfer and Storage Co. received a medal and diploma for his exhibit at the World's Fair at Chicago in 1893 of a steel silo for preserving ensilage. The diploma says of the silo that it is meritorious because strong, durable and of steel.

The Charter Gas Engine Co. of Sterling, Ill., has just issued catalogue L of the Charter Gas and Gasoline Engine. It contains several cuts of gas engines, and text giving a full explanation of the working parts, which makes it a book of value to every power user.

The Sykes Steel Roofing Co. of Chicago, Ill., and Niles, Ohio, is fitting up the basement of its building at Chicago and will greatly increase its present facilities by the addition of new machinery. The basement will give the company about 3,500 square feet of additional space.

Ph. Benz & Co., commission merchants in grain, seeds and hay at Chicago, Ill., have removed their general offices from 103 Omaha Block to large and convenient quarters in rooms 204 and 205 in the same building. The company has very wide connections throughout the West and Northwest, and the change was made to accommodate its increasing business.

Charles Kaestner & Co. have recently moved into their new building at 241 to 247 South Jefferson street. They have the contract for a large brewery for the Consumers' Brewing Co., Washington, D. C., including the buildings, boilers, engines and machinery complete. They also have contracts for supplying the machinery equipment for the Golden Brewing Co. at Golden, Colo., and for the San Diego Brewing Co., San Diego, Cal. They are also putting in the engines, boilers, shafting, pulleys, etc., for the Indiana Steel Casting Co., Mt. Pellar, Ind.

### ADDITIONAL CROP REPORTS.

WISCONSIN. Wonevoo, Juneau Co., June 12.—Oats and barley promise a big crop. Wheat is almost an entire failure. Rye will be a good crop. The acreage of oats and rye is about the same as last year. W. H. FUNK.

ILLINOIS. Yates City, Knox Co., June 9.—The acreage of wheat, oats and corn is 100 per cent., the condition being 100 per cent. compared with the average. The stocks in store and in farmers' hands are 50 per cent. more than usual. J. KNOX & CO.

## SCREENINGS.

"I may be little," observed the chinch bug, picking its teeth contemplatively, "but when I turn myself loose I can lift the wheat market higher than all the big bugs on 'Change put together!'"

Putson—"Say, old man, how does it happen you haven't got anything in wheat?"

Kawls—"In wheat? Great Scott, I'm afraid to own even a family Bible these days!"

Peoria Receiver—Why do you permit the railroad company to exact more than the schedule rate for transporting your grain?

Iowa Shipper—So that I can have the glory of suing and beating it in the courts.

"Yes," said the optimistic farmer, "there's lots of rust in my wheat, but I ain't kicking. My dog run through one of my fields the other day and he was so red when he came out that I sold him to an Englishman for a new kind of coach dog and got \$100 for him."

An inquisitive person passing along a country road stopped to talk with a farmer hoeing corn.

"Your corn is small," said the inquisitive person.

"Yes. I planted that kind," replied the farmer.

"It looks yellow."

"I planted yellow corn."

"I don't think you'll get more than half a crop."

"Don't expect to—I planted it on shares."

## Grain Dealers' Associations.

### THE GRAIN, HAY AND FEED RECEIVERS' ASSOCIATION OF CINCINNATI.

President, Chas. S. Maguire; secretary, Peter Van Leunen; treasurer, James A. Loudon.

### THE GRAIN RECEIVERS' AND SHIPPERS' ASSOCIATION OF CHICAGO.

President, John Hill Jr.; vice-president, S. H. Greeley; secretary, W. N. Eckhardt; treasurer, Wm. Nash.

### CAR GRAIN ASSOCIATION OF BUFFALO.

President, Charles Kennedy; vice-president, J. H. Rodebaugh; treasurer, W. V. Downer; secretary, S. W. Yantis.

### THE GRAIN RECEIVERS' ASSOCIATION OF MINNEAPOLIS.

President, A. M. Woodward; vice-president, W. G. Nicholls; secretary, Wm. B. Mohler; treasurer, H. W. Commons.

### SOUTHERN ILLINOIS GRAIN BUYERS' ASSOCIATION.

President, W. D. Sparks, Alton; vice-president, J. E. Duffield, Jerseyville; treasurer, W. B. Pierce, Alton; secretary, G. E. Brown, Brighton.

### ILLINOIS GRAIN DEALERS' ASSOCIATION.

President, John Crocker, Maroa; vice-president, E. R. Ulrich, Jr., Springfield; treasurer, F. M. Pratt, Decatur; secretary, B. S. Tyler, Decatur.

### CENTRAL IOWA GRAIN DEALERS' ASSOCIATION.

President, Allen Smith, Boone; vice-president, B. A. Lockwood, Des Moines; treasurer, M. McFarlin, Des Moines; secretary, M. T. Russell, Des Moines.

### GRAIN SHIPPERS' ASSOCIATION OF NORTHWESTERN IOWA.

President, T. M. C. Logan, Onawa; vice-president, E. M. Parsons, Carroll; secretary and treasurer, F. D. Babcock, Ida Grove; assistant secretary, F. G. Butler, Schaller.

### OHIO GRAIN DEALERS' ASSOCIATION.

President, Daniel McAllister, Columbus; vice-president, J. B. Van Wagener, London; treasurer, Jesse Brundige, Kingston; secretary, Huntington Fitch, Columbus.

### GRAIN DEALERS' ASSOCIATION OF SOUTHWESTERN IOWA AND NORTHWESTERN MISSOURI.

President, R. R. Palmer, Creston, Iowa; vice-president, E. H. Vanscholach, Griswold, Iowa; treasurer, J. B. Samuels, Riverton, Iowa; secretary, G. A. Stibbens, Coburg, Iowa.



## RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since May 15 has been as follows:

May	No. 2 <sup>+</sup> R.W. WHT.		No. 2 <sup>+</sup> WHT.		No. 2 CORN.		No. 2 OATS.		No. 2 RYE.		No. 3 <sup>+</sup> BARLEY.		No. 1 <sup>+</sup> FLAXSEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	67 1/2	67 1/2			29	19 1/4	19 1/4		29	34	87 1/2	87 1/2		
16					28 1/2	20 1/4	19 1/4		30	34	88	88 1/2		
17					28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
18	66 1/2	66 1/2			28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
19					28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
20					28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
21					28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
22	65	65			28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
23	64	64			28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
24					28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
25	63 1/2	64 1/2			28 1/2	20 1/4	19 1/4		30	34	88 1/2	88 1/2		
26	61 1/2	63 1/2			27 1/2	18 1/4	18 1/4		29	33	85	85		
27	62 1/2	63 1/2	60	60	28 1/2	18 1/4	18 1/4		30	34	88 1/2	88 1/2		
28	62 1/2	62 1/2			27 1/2	18 1/4	18 1/4		29	33	83 1/2	83 1/2		
29	62 1/2	62 1/2			27 1/2	18 1/4	18 1/4		29	33	83 1/2	83 1/2		
30*					27 1/2	18 1/4	18 1/4		29	33	83 1/2	83 1/2		
June														
1					27	17 1/4	17 1/4		32	36	81 1/2	81 1/2		
2					26 1/2	17 1/4	17 1/4		32	36	81 1/2	81 1/2		
3	60	60 1/2	57 1/2	57 1/2	27 1/2	17 1/4	17 1/4		32	36	78 1/2	78 1/2		
4					27 1/2	17 1/4	17 1/4		32	36	79	79		
5	61 1/2	61 1/2			27 1/2	17 1/4	17 1/4		32	36	79 1/2	79 1/2		
6					28 1/2	18 1/4	18 1/4		34	38	81 1/2	81 1/2		
7					27 1/2	17 1/4	17 1/4		32	36	81	81		
8	65 1/2	67 1/2			27 1/2	17 1/4	17 1/4		32	36	81	81		
9					27 1/2	17 1/4	17 1/4		32	36	81	81		
10	61 1/2	61 1/2			27 1/2	17 1/4	17 1/4		32	36	81	81		
11	59	59			27 1/2	17 1/4	17 1/4		32	36	81	81		
12					27 1/2	17 1/4	17 1/4		32	36	81	81		
13	61	61			27 1/2	17 1/4	17 1/4		32	36	81	81		
14					27 1/2	17 1/4	17 1/4		32	36	81	81		

\*Holiday. +Free on board, switched and delivered. †Free on board or switched. §On track.

During the week ending May 16, Prime Contract Timothy sold at \$3.25@3.35 per cental, Prime Contract Clover Seed at \$7.25@7.35, Hungarian at \$0.65@0.85, German millet at \$0.70@1.00, buckwheat at \$0.75@0.90 per 100 pounds.

During the week ending May 23 Prime Contract Timothy sold at \$3.20@3.30 per cental, Prime Contract Clover Seed at \$7.20@7.30, Hungarian at \$0.65@0.80, German millet at \$0.70@0.85, buckwheat at \$0.75@0.90 per 100 pounds.

During the week ending May 29 Prime Contract Timothy sold at \$3.20@3.25 per cental, Prime Contract Clover Seed at \$7.20@7.50, Hungarian at \$0.65@0.85, German millet at \$0.70@0.90, buckwheat at \$0.75@0.90 per 100 pounds.

During the week ending June 6 Prime Contract Timothy sold at \$3.12 1/2@3.20 per cental, Prime Contract Clover Seed at \$7.40, Hungarian at \$0.75@1.00, German millet at \$0.70@0.95, buckwheat at \$0.40@0.45 per 100 pounds.

## RECEIPTS AND SHIPMENTS AT NEW ORLEANS.

The receipts and shipments of rice, etc., at New Orleans, La., during the month of May, as compared with the same period of the preceding year, were, according to Hy. H. Smith, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	356,924	102,464	262,415	112,668
Corn, bushels.....	1,119,354	82,013	1,044,717	121,011
Oats, bushels.....	261,201	179,256	248,500	16,000
Clean Rice, barrels.....	660	581		
Rough Rice, sacks.....	19,978	14,062		
Flour, barrels.....	42,857	69,769	11,290	9,657

Following is Secretary Smith's account of the movement of rice to June 1: Rough rice, in sacks: Receipts since August 1, 1,135,210 in 1896, 695,698 in 1895. Distribution during May, 63,406 in 1896, 50,678 in 1895; distribution since August 1, 1,060,840 in 1896, 675,429 in 1895. Total stock in first and second hands: August 1, 45,469 in 1895; June 1, 119,839 in 1896, 63,658 in 1895; May 1, 163,267 in 1896, 99,374 in 1895. Clean rice in barrels: Receipts since August 1, 5,433 in 1896, 1,044 in 1895. Sales reported during May, 12,014 in 1896, 12,912 in 1895; sales reported since August 1, 242,015 in 1896, 168,620 in 1895. Total stock in first and second hands: No. 1, June 1, 14,185 in 1896, 8,756 in 1895; May 1, 18,542 in 1896, 9,079 in 1895; No. 2, June 1, 1,296 in 1896, 122 in 1895; May 1, 2,460 in 1896, 595 in 1895.

In September, 1895, when the last government report of condition was made, and when discouragement over the crop was most rife, the average condition reported by the National Bureau was 75.4, which, on the basis of 15.7 bushels as the meaning of 100 as recently announced by a department official, should have been followed by a rate of yield of 11.8 bushels. As a matter of fact, the government finally reported the rate of yield, after the test of thrashing, at 13.7 bushels, showing that in the period of panic final condition was reported too low by at least 12 points, and that September condition should have been 87 instead of 75.

## RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, Ohio, during the month of May, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	142,154	535,369	355,773	916,600
Corn, bushels.....	142,130	313,742	514,700	477,510
Oats, bushels.....	6,100	21,700	46,300	48,600
Barley, bushels.....		6,600		
Rye, bushels.....	3,000	7,208		6,000
Clover Seed, bags.....				
Flour, barrels.....	5,033	5,013	81,477	126,493

## RECEIPTS AND SHIPMENTS AT CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month of May, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	46,353	80,455	32,274	51,999
Corn, bushels.....	248,418	309,782	26,984	44,478
Oats, bushels.....	288,742	249,323	122,430	107,782
Barley, bushels.....	21,000	4,903	20	25
Rye, bushels.....	27,005	50,068	8,074	34,507
Clover Seed, bags.....	181	728	604	381
Timothy Seed, bags.....	5	643	304	532
Other grass seeds, bags.....	8,602	1,032	6,746	3,023
Hay, tons.....	5,009	10,353	2,040	6,342
Flour, barrels.....	101,408	177,381	78,229	151,229
Malt, bushels.....	53,647	79,531	59,480	53,679

## RECEIPTS AND SHIPMENTS AT BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month of May, as compared with the same period of the preceding year, were, according to Wm. Thurstone, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts by Lake.		Shipments by Canal.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	10,464,157	6,118,304	3,184,464	1,842,533
Corn, bushels.....	3,199,672	5,025,606	338,860	177,311
Oats, bushels.....	5,023,672	5,355,722	2,827,432	1,627,591
Barley, bushels.....	1,240,693	105,096	241,177	26,000
Rye, bushels.....	592,998	94,935	166,560	
Grass seed, bags.....	6,720	1,357		
Flaxseed, bushels.....	499,570		* 9,715,273	
Flour, barrels.....	913,168	1,222,863		200

\* Pounds.

## RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month of May, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	48,150	112,800	19,200	153,800
Corn, bushels.....	1,228,150	1,487,000	220,150	480,450
Oats, bushels.....	1,078,550	2,634,500	1,302,750	2,178,000
Barley, bushels.....	56,700	37,800	28,700	23,100
Rye, bushels.....	5,400	12,000	4,200	3,000
Mill Feed, tons.....	1,080	330	5,130	6,026
Seeds, pounds.....		30,000		90,000
Broom Corn, pounds.....	180,000	60,000	156,500	30,000
Hay, tons.....	3,420	1,240	1,740	310
Flour, barrels.....	17,700	41,250	18,750	36,750
Spirits and Liquors, bbis.....	375	1,742	16,021	17,658
Syrup and Glucose, bbis.....	1,050	900	26,740	37,754

## RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the month of May, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	451,286	671,052	269,600	97,400
Corn, bushels.....	235,950	105,950	8,800	3,400
Oats, bushels.....	1,005,000	1,250,000	773,500	842,550
Barley, bushels.....	660,800	261,450	355,243	7,300
Rye, bushels.....	118,075	84,170	33,600	39,489
Grass Seed, pounds.....	466,407	7,600	180,250	10,949
Flaxseed, bushels.....	17,820	2,900	14,500	
Hay, tons.....	1,654	1,212	447	72
Flour, barrels.....	182,410	186,800	297,128	277,986

## RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during May, 1896 and 1895, of seeds, hay and broom corn:

Receipts.	Timothy lbs.	Clover lbs.	Other Grass Seeds, lbs.	Flax-seed, bu.	Broom Corn, lbs.	Hay, tons.
1896.....	1,836,125	193,615	1,748,633	314,712	860,720	24,228
1895.....	563,005	24,286	792,161	97,354	127,600	18,119
Shipments						
1896.....	2,667,740	177,802	2,107,531	281,775	945,136	8,313
1895.....	1,038,879	206,243	574,288	29,083	201,376	793

## RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the month of May, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	3,212,280	26,000,950	795,840	440,680
Corn, bushels.....	114,090	130,400	13,460	22,210
Oats, bushels.....	1,008,260	403,890	713,220	368,560
Barley, bushels.....	55,320	5,920	41,340	13,940
Rye, bushels.....	30,530	6,690	29,410	10,340
Flaxseed, bushels.....	34,620	6,856	43,790	17,720
Hay, tons.....	1,648	2,199	53	38
Flour, barrels.....	15,111	10,864	759,152	879,829

## RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the month of May, as compared with the same period of the preceding year, were, according to F. W. Waring, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	134,894	161,266	69,280	368,636
Corn, bushels.....	78,039	74,574	29,179	9,719
Oats, bushels.....	93,358	142,528	2,135	8,056
Barley, bushels.....	63,235	43,618		
Rye, bushels.....	7,499	4,550	18,504	
Hay, tons.....	1,200	1,380		
Flour, barrels.....	13,225	13,106	8,805	12,105

## RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month of May, as compared with the same period of the preceding year, were, according to George H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.



## INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector D. W. Andrews, the grain received at Chicago during the month of May, 1896, was graded as follows:

Railroad.	WINTER WHEAT.									
	White.					Hard.				
	2	3	4	1	2	3	1	2	3	4
C. B. & Q.	1	1	1	6	8	34	4	8		
C. R. I. & P.	1	1	4	6	3	7	4			
Chicago & Alton			4	5	6	1	5	9		
Illinois Central			8	7	3	6	2			
Freeport Div., I. C.					1					
Galena Div., C. & N. W.				1	2					
Wis. Div., C. & N. W.					2					
Wabash					1	4	3			
C. & E. I.					6	2	1			
C. M. & St. P.	1	2								
Wisconsin Central					6	2				
Chicago & Great West.										
A. T. & S. Fe.				1	6	3	5	1	2	
E. J. & E.						3	2			
Through and special										
Total each grade	2	3		13	31	36	63	20	26	
Total winter wheat	5	6		44						145

Railroad.	SPRING WHEAT.									
	Colo-rado.		Northern.		2		3		4	
	2	3	2	3	2	3	2	3	2	3
C. B. & Q.					5	2				
C. R. I. & P.			1	1	25	4				
Chicago & Alton										
Illinois Central					4					
Freeport Div., I. C.										
Galena Div., C. & N. W.					3	22	7	1		
Wis. Div., C. & N. W.										
Wabash										
C. & E. I.										
C. M. & St. P.					1	9		6		1
Wisconsin Central										
Chicago & Great West.										
A. T. & S. Fe.										
E. J. & E.										
Through and special										
Total each grade	9	9	4	5	70	13	7		1	4
Total spring wheat	9	9			79					5

Railroad.	CORN.									
	Yellow.		White.		2		3		4	
	2	3	2	3	2	3	2	3	2	3
C. B. & Q.	164	555	127	85	156	331	55	13		
C. R. I. & P.	194	96	164	22	208	168	15	2		
Chicago & Alton	194	96	164	22	208	168	15	2		
Illinois Central	287	32	94	42	166	79	21	10		
Freeport Div., I. C.	78	167	433	74	143	67	49	4		
Galena Div., C. & N. W.	22	14		5	5	3	10	1		
Wis. Div., C. & N. W.	184	32	26	1	75	19	16	3		
Wabash										
C. & E. I.										
C. M. & St. P.										
Wisconsin Central										
Chicago & Great West.										
A. T. & S. Fe.	11	4	5	1	171	10	4			
E. J. & E.	151	22	86	5	179	5	8	1		
Through and special	89	126	84	31	109	82	26	2		
Total each grade	86	36	61	26	78	43	7	2		
Total corn	2,366	1,165	1,552	356	1,436	894	232	54		8,055

Railroad.	OATS AND RYE.									
	OATS.					RYE.				
	White.			2		3			4	
C. B. & Q.	52	560	166	146						
C. R. I. & P.	87	671	32	419						
Chicago & Alton	26	50	67	102						
Illinois Central	25	152	309	297	1					
Freeport Div., I. C.	193	295	72	13	1					
Galena Div., C. & N. W.	152	109	11		2					
Wis. Div., C. & N. W.	10	81	54	49	3					
Wabash		24	21	11						
C. & E. I.										
C. M. & St. P.	151	411	46	209						
Wisconsin Central		6			2					
Chicago & Great West.	30	140	25	14						
A. T. & S. Fe.	23	81	59	41						
E. J. & E.	12	30	19	53						
Through and special	32	28	28	8						
Total each grade	747	2,608	912	1,437	2	19	75	12		
Total oats and rye						5815				87

\* White Clipped.

Railroad.	BARLEY AND TOTAL GRAIN RECEIPTS.									
	Barley.					Total No. Cars all Grain by Roads				
	3	3	2	3	4	5	No Grade.			
C. B. & Q.					33	4		2,538		
C. R. I. & P.					34	8	1	2,185		
Chicago & Alton								979		
Illinois Central								2,538		
Freeport Div., I. C.								276		
Galena Div., C. & N. W.					51	6	1	1,079		
Wis. Div., C. & N. W.					120	0	3	317		
Wabash								1,169		
C. & E. I.								333		
C. M. & St. P.					219	48	6	1,256		
Wisconsin Central								25		
Chicago & Great West.					41	12	1	479		
A. T. & S. Fe.								680		
E. J. & E.								667		
Through and special								443		
Total each grade	2				578	100	12	8	14,964	
Total barley								700		
Total grain, cars									14,964	

## VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, June 13, 1896, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, Bu.	Oats, bu.	Rye, bu.	Barley, Bu.
Albany		20,000	50,000		
Baltimore	308,000	820,000	266,000	27,000	
Boston	620,000	58,000	5,000		
Huffalo	929,000	247,000	410,000	191,000	205,000
do. afloat					
Chicago*	13,871,000	5,577,000	1,678,000	307,000	10,000
do. afloat					
Cincinnati	5,000	2,000	16,000	1,000	8,000
Detroit	121,000	18,000	13,000		2,000
Duluth	8,413,000	5,000	227,000	308,000	161,000
do. afloat					
Indianapolis	30,000				
Kansas City	1,010,000	30,000	26,000	28,000	
Milwaukee	503,000	2,000		410,000	26,000
do. afloat					
Minneapolis	17,050,000	55,000	540,000	82,000	19,000
Montreal	456,000	51,000	386,000	6,000	65,000
New York	2,459,000	1,052,000	1,761,000	63,000	8,000
do. afloat	122,000		60,000		
Oswego		8,000			60,000
Peoria	17,000	8,000	165,000		2,000
Philadelphia	166,000	79,000	137,000		
St. Louis	471,000	149,000	69,000	1,000	
do. afloat	113,000	95,000			
Toledo	257,000	69,000	17,000	100,000	
do. afloat					
Toronto	98,000	3,000	89,000		21,000
On Canals	1,232,000	166,000	897,000	64,000	110,000
On Lakes	1,132,000	705,000	1,605,000		182,000
On Miss. River	103,000	93,000	33,000		
Total	49,486,000	9,406,000	8,430,000	1,590,000	877,000
Corresponding date 1895	47,717,000	10,785,000	8,686,000	117,000	118,000

\* Including grain in National Elevator, which is not regular under the rules of the Chicago Board of Trade.

## DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows the destination of the wheat exported from the United States to be as follows:

Countries.	Month ending April 30.		Ten months ending April 30.	
	1896.	1895.	1896.	1895.
United Kingdom	1,835,200	3,003,276	37,602,353	46,571,891
Germany	108,707	160,722	724,126	2,253,160
France		125,025	114,069	1,568,791
Other Europe	416,829	1,888,917	6,287,997	11,594,806
British North America	125,709	165,216	2,256,433	2,654,389
Mexico			7	7,929
Central American States and British Honduras	4,322	3,833	43,775	72,704
West Indies and Bermuda	58	102	11,794	7,343
Brazil			31	63
Other South America	62	62	4,021	1,720
Asia and Oceania	188,251	1,498	1,825,100	31,553
Africa	264,445	10,717	1,577,402	31,638
Other countries				52
Total bushels	2,941,593	5,337,929	50,148,366	64,706,036

## DESTINATION OF AMERICAN CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

Countries.	Month ending April 30.		Ten months ending April 30.	
	1896.	1895.	1896.	1895.
United Kingdom	1,948,045	1,738,484	43,358,353	11,190,548
Germany	1,526,624	706,169	11,541,954	2,374,082
France	446,429	220,000	3,816,712	621,101
Other Europe	1,910,319	562,000	19,071,768	3,027,602
British North America	1,011,370	734,432	4,414,907	1,802,050
Mexico	306,899	14,302	1,246,918	179,579
Central American States and British Honduras	10,322	9,097	62,681	116,648
Cuba	1,395	18,548	171,329	331,261
Puerto Rico	95		195	1,200
Santo Domingo	95	280	1,740	3,658
Other West Indies and Bermuda	56,350	44,795	568,619	532,300
South America	1,975	4,538	103,387	94,756
Asia and Oceania	450	234	35,006	9,163
Other countries	234,507	700	639,589	4,266
Total bushels	7,454,885	4,083,579	85,093,158	20,288,162

## EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending June 8, as compared with same weeks last year, have been as follows:

||
||
||



# ELEVATOR

## GRAIN NEWS

Edward Martin is buying grain at Greenwich, Ill.  
J. R. Barker will erect an elevator at Green Valley, Ill.

Myers Bros. new elevator at Lemert, Ohio, is completed.

A cottonseed oil mill may be erected at Celeste, Texas.

Farmers will erect a 35,000-bushel elevator at Coles, Man.

Geroe Bros. will establish a cottonseed oil mill at La Fayette, Ga.

The Omaha Elevator Co. is erecting an elevator at North Loup, Neb.

A new elevator and feed mill is to be erected at Hutchinson, Minn.

J. F. Dunlap will erect a 300-barrel rice mill at Lake Charles, La.

T. M. C. Logan, grain dealer of Onawa, Iowa, recently sold his elevator.

Spellman, Orton & Spitley are building a grain elevator at Lawndale, Ill.

Smith & Snow, dealers in grain and hay at Westfield, Mass., failed recently.

It is reported that a steel storage tank elevator is to be erected at Glasgow, Mo.

Gilmore & Franks are overhauling and repairing their elevator at Gridley, Ill.

The Buell & Baker Commission Co. has opened a branch office at Keokuk, Iowa.

C. W. Gilman will erect an elevator at Wilder, Minn., where he has leased a site.

Westfall & Durbin are building a 60,000-bushel elevator at Brown's Valley, Minn.

P. F. Johnston, seed dealer of Victoria, B. C., assigned recently to G. H. Maynard.

J. W. Hays is contemplating the erection of a cleaning elevator at Superior, Wis.

It is expected that an elevator will be built this summer at Qu'Appelle, Assiniboia.

Mercer, Henley & Co. have engaged in the grain and flour business at Carthage, Ind.

I. F. Sperry & Co. have succeeded J. E. Morrison & Co., grain dealers of New Ross, Ind.

Hulst & Price, dealers in grain, lumber and coal at Rapid City, S. D., assigned recently.

Gilman Bros., dealers in grain, flour and feed at Plymouth, Wis., assigned recently.

The contract has been let for the erection of a cottonseed oil mill at Clarksdale, Miss.

There is a movement on foot for the erection of a cottonseed oil mill at Greer Depot, S. C.

William Zerwakh and others contemplate the establishment of a distillery at Pekin, Ill.

It is reported that the Canadian Pacific R. R. will build a large elevator at Prescott, Ont.

Wilkerson & Comer, grain dealers and millers of Birmingham, Ala., have dissolved partnership.

Melhorn Bros. will rebuild their elevator at Blue Mound, Ill., which was destroyed by fire recently.

J. W. Nichols has purchased the grain and implement business of Woodbury Bros. at Asbury, Mo.

D. M. Burner, grain dealer of New Holland, Ill., has 75,000 bushels of ear corn cribbed at that place.

F. H. Peavey & Co. intend to erect an elevator at Minneapolis to have a capacity of 1,000,000 bushels.

B. F. Poorman, miller of West Union, Ill., has completed a new 18,000-bushel elevator at that place.

J. M. Ball has purchased the business of H. M. Eakin, dealer in grain, etc., at Salt Lake City, Utah.

M. Kenney recently purchased an 8½-horse power Otto Gas Engine to place in his elevator at Ottawa, Ill.

F. G. Kinney & Co. have begun work on the construction of a cottonseed oil mill at Birmingham, Ala.

The contract has been let for the erection of a cottonseed oil mill and ginnery at Gabbets, Ga., by Potts Bros. of that place, and F. M. Potts of Atlanta.

Moritz Thompson of the Centennial Mill, John W. Goss and J. D. Farrell of Seattle, Wash., are at the head of an enterprise to erect a 500,000-bushel elevator at that place in time for the new crop. About

\$50,000 has been pledged, practically insuring the erection of the house, the promoters say.

A grain elevator will be built at Rockford, Wash., during the summer in time to handle this year's crop.

Marion O. Randolph has succeeded to the grain and feed business of Randolph & Jones at Columbus, Ohio.

Edmund Smith has started in the seed business at Winnipeg, Man., and will also deal in feed and flour.

The Sumter Cotton Oil and Fertilizer Co. has been organized at Sumter, S. C., to build a cotton seed oil mill.

J. L. Smiley, grain dealer of Watseka, Ill., has put in a Barnard & Leas No. 1 Little Victor Corn Sheller and Cleaner.

Echenrode & Hoffman have succeeded to the grain and implement business of Stallsmith & Hoffman at Biglerville, Pa.

A farmer's association has let the contract for an elevator to be erected at Manito, Ill., and work has been commenced.

E. R. Ulrich & Son recently ordered a Barnard & Leas Combined Sheller and Cleaner for their elevator at Dawson, Ill.

James Crenshaw & Co., dealers in grain, etc., formerly of Orange City, Fla., have moved their business to Tampa.

Joseph Heile, grain and feed dealer of Cincinnati, Ohio, assigned recently. His liabilities are \$5,000, assets \$2,000.

The Shelburne Flax Co. of Shelburne, Ont., has been incorporated with a capital stock of \$40,000 to manufacture flax products.

Heffner & Co., grain dealers of Circleville, Ohio, have ordered from The Barnard & Leas Mfg. Co. a No. 3 Cornwall Corn Cleaner.

The Crescent Grain Co. has been incorporated at Bloomington, Ill., with a capital stock of \$25,000, to deal in grain, coal and lumber.

The Chamber of Commerce of Wilmington, N. C., is considering the feasibility of securing the erection of an elevator at that place.

The firm of Stoddard & Reynolds, grain dealers of Sentinel Butte, N. D., has been dissolved. J. B. Stoddard will continue the business.

T. Carinody, grain dealer of Merna, Ill., is putting a new dump in his elevator and will overhaul it preparatory to receiving new grain.

G. W. Van Dusen & Co. of Minneapolis recently purchased one of The Barnard & Leas Mfg. Co.'s No. 4 horizontal warehouse scourers.

James Scott, grain dealer of Argyle, Minn., writes us that he has completed an elevator of 25,000 bushels' capacity at that place.

Watkins, Fretts & Co. of Chicago, Ill., recently purchased a No. 8 Cyclone Dust Collector of The Barnard & Leas Mfg. Co. of Moline, Ill.

Farmers of West Concord, Minn., have let the contract for the erection of an elevator, and are going to embark in the grain business.

A branch office of a Chicago bucket shop has been opened at Marion, Ind., with private wires and other conveniences for catching suckers.

The Barnard & Leas Mfg. Co. recently sold an improved No. 3 elevator separator for one of the Angus Smith elevators at Milwaukee, Wis.

John Quorn and Simon Healey will each erect an elevator at Abercrombie, N. D., this summer. A flour mill will also be erected at that place.

G. W. Cole has purchased the elevator and grain business of W. H. Fluke at Horton, Kan., and the latter will continue in the implement business.

T. W. Miller is building an elevator at Kirkwood, Wis., which will be 40x50 feet in size, with a 10-foot basement. It will have all modern conveniences.

J. A. Resler is erecting an elevator at Caledonia, Ohio, to be operated in connection with a new flour mill, which The J. B. Allfree Mfg. Co. is erecting.

The mill property at Harvard, Ill., has been bought by Mr. Woodruff of Rockford, and will be converted into an oatmeal factory or an elevator.

At a recent meeting of the farmers' institute of Elkhorn, Man., it was decided to form a joint stock company and erect a grain elevator at that point.

There is about 200,000 bushels of corn in the vicinity of Wayne, Kan., held by speculators for an advance in the price, which does not come very fast.

S. P. Stewart & Son of Bowling Green, Ohio, have prepared the plans for the new elevator of The Bush Co., Ltd., at South Brooklyn, N. Y. There will be 120 steel storage bins, 80 feet deep and each of 16,700 bushels' capacity, a total capacity of 2,040,000

bushels. Grain will be transferred by means of 13 conveyor belts, 6 above and 6 below the bins, and one cross belt. Buckets will be used in elevating grain.

Hermiller Bros., grain dealers of Ottawa, Ohio, have dissolved partnership. Joseph Hermiller Jr. will conduct the business alone, John B. Hermiller retiring.

The Lake of the Woods Milling Co. intends to erect a large elevator at Winnipeg, Man., this summer, and also smaller houses at points not yet decided upon.

The Heidenreich Construction Co. has completed the new 250,000-bushel elevator at Mobile, Ala., and has turned it over to the Mobile Elevator Co., which will operate it.

M. C. Ott's new elevator at Wilton, Iowa, which was erected to take the place of the one burned recently, has been completed. It has a capacity of 10,000 bushels.

Samuel Roush and George Milk of Momence, Ill., have formed a partnership and intend to carry on an extensive business in grain and hay at Momence and other points.

The firm of J. A. Parsons & Co., grain dealers of Edwardsburg, Mich., has been dissolved. J. L. Kleckner has retired, and John A. Parsons will continue the business.

L. H. Perry has purchased half interest in R. G. Risser's elevator and grain business at St. Anne, Ill., for \$3,000. The new firm looks forward to an extended business.

The farmers' co-operative elevator at Colon, Neb., was recently sold at sheriff's sale for \$1,250. The plant originally cost \$2,700. It was bought by Ole Lundgren of Wahoo.

F. H. Moore of Concord, N. H., has purchased and is now conducting the grain, hay and straw business which belonged to the Laconia Ice, Coal & Wood Co. at Belknap, N. H.

H. W. Allsop, grain dealer of Williamstown, Mass., who disappeared some time ago, has returned to his home. He had been taken ill and for a time lost the power of memory.

The Hall Meacham Co., grain and lumber dealer of Plainview, Minn., has put one of the Barnard & Leas Company's Little Victor Combined Cleaners and Shellers in its elevator.

"Hard times" are said to have gone against the Farmers' Elevator Co. at Preston, Minn., and the management is said to be \$1,000 to \$3,000 short. The manager has resigned.

The Mabel Stock and Grain Co. of Mabel, Minn., has been dissolved. H. C. Hellickson & Co. will carry on the company's grain business, operating an elevator recently constructed.

O. P. Lecompte has opened his 30,000-bushel elevator at Concordia, Kan., which was closed a year ago on account of poor crops. He will also operate elevators at Cuba and Ames.

The Johnson-Brinkman Commission Co. of Kansas City, Mo., is receiving bids for new machinery to increase the capacity of its elevator at Rosedale, Kan., which will be improved and enlarged.

Long & Messersmith, grain dealers of Savoy, Ill., have dissolved partnership, and the business will be continued by H. Long and his son C. O. Long, under the firm name of Long & Son.

H. C. Misner, in charge of the Minnesota and Northern Elevator at Euclid, Minn., has shipped out all the grain and is overhauling the elevator preparatory to receiving the new crop.

The Brandon Farmers' Warehouse Association of Brandon, Minn., held a meeting May 30 and decided to dissolve. The Association's elevator collapsed last April with 25,000 bushels of grain.

Andrew W. Woodall, grain commission merchants of Baltimore, Md., failed recently. C. W. Huisler being appointed preliminary trustee. Liabilities amount to about \$30,000, with no assets.

The Williams Grain Co. has been incorporated at Chicago with a capital stock of \$10,000, to deal in grain, etc. The incorporators are: Jacob Williams, Jas. D. Williams and Berton E. Leonard.

The Gate City newspaper of Keokuk, Iowa, says that there is great need of an elevator at that place with transfer facilities. The Hambleton Milling Co. is now transferring considerable grain.

C. E. Jackson of Corning, Kan., recently bought of The Barnard & Leas Mfg. Co. all the necessary machinery for a feed mill and elevator, including feed mill, meal sifter, Cornwall Corn Cleaner and Sheller.

The John Miller Company has been organized at Duluth, Minn., to carry on a grain commission business. Ex-Governor John Miller of North Dakota is president and manager, Walter R. Reed, secretary, and H. F. Choffa, treasurer. Also, Donald Morrison, who has charge of the



Duluth business of the Sawyer Grain Co., will be connected with the business. The company has already an established business, having shipped considerable grain last year.

There was said to be a grain blockade at Ogdensburg, N. Y., and Prescott, Ont., the first week in June, indicating a lack of facilities at these points. The elevators were all full, with no orders for shipment.

The Seckner Contracting Co. has just finished the new addition to Yost & Co.'s elevator at Fowler, Ind. This addition to the elevator makes it one of the finest and best equipped on the Big Four Railroad.

Charles Beggs has purchased Mr. Winkler's interest in the grain and hay business of the Kremer & Winkler at Arcola, Ill., and the firm name is now Kremer & Beggs. Mr. Winkler intends to go to California.

John W. Walker, until recently in the grain business at Walker, Ill., has assigned to Robert H. Woodcock. Liabilities are \$68,000. Assets include a farm and homestead, value not given. Bad investments were the cause of failure.

The Lee Grain Co. of Kansas City, Mo., recently purchased a 2,000-bushel Barnard Separator to be placed in the National Elevator. Power shovels and other machinery will be put in, for which Aug. Wolf & Co. received the contract.

R. P. Wood & Co., grain dealers formerly of Colfax, Ill., write us that they have sold out their business at that place and will engage in the grain trade at Normal, Ill., where they are building a modern elevator to cost \$3,000.

Hyatt & Rogers, grain dealers of Washington, Ind., will put in additional machinery, which they have ordered of The Barnard & Leas Mfg. Co., consisting of a No. 2 Victor Corn Sheller, No. 2 Cornwall Corn Cleaner and No. 35 special grain separator.

The Interstate Grain Storage Co. of Fostoria, Ohio, informs us that the directors of the company held a special meeting May 12 and elected the following officers: A. Mennel, president; Isaac Harter, vice-president; W. F. Day, secretary and treasurer.

G. W. Van Dusen & Co. have completed arrangements for the erection at Minneapolis of a 1,100,000-bushel elevator as a part of the Interstate Grain Co.'s plant. It will be equipped as a complete working house, with an outfit of cleaning machinery, etc.

J. E. Morrison of New Ross and F. A. Finch of Frankfort, Ind., have engaged in the grain business at Lebanon, Ind., under the firm name of Morrison & Finch. The new company purchased the grain business and two elevators of Morris & Son at Lebanon.

The site of elevator A2 at Minneapolis was recently sold, together with elevator A1, to J. J. Hill, president of the Great Northern R. R. G. W. Van Dusen & Co. have a lease of elevator A1 until fall. It is not known what the new owner of the property will do with it.

J. W. Arnold, miller of Louisville, Kan., will put a full outfit of The Barnard & Leas Mfg. Co.'s machinery in his new feed mill and elevator at that place. The equipment will include a feed mill, corn sheller, Cornwall Cleaner, shafting, pulleys, belting, logging and spouting.

Declining prices have made a rough and rugged road for the farmers' elevators the past year. The Preston elevator is said to be in the hole all the way from \$1,000 to \$2,000; the Fountain elevator about \$2,000, and the elevator at Lime Springs still worse.—Times, Preston, Minn.

The George I. Kimball Grain Co. has been incorporated at Kansas City, Mo., with a capital stock of \$10,000, divided into 100 shares. Of these Geo. I. Kimball owns 50 shares, Byron Tyler 49 shares and John Sellon one share. The company will carry on a grain, hay and mill business.

Harry W. Wade, formerly of Kent, and David Zerwekh of Seattle, Wash., have formed a partnership under the name of Wade & Zerwekh, and have taken the warehouse and dockage at Seattle, recently vacated by James E. Galbraith, where they will conduct a wholesale trade in hay, grain, feed and flour.

The Huntley Mfg. Co. of Silver Creek, N. Y., have sold to James Stewart & Co. of St. Louis, Mo., two No. 8 separators and two No. 9 oat clippers for the new Illinois Central elevator at New Orleans; and to The Heidenreich Construction Co. of Chicago three No. 9 separators, and one large size oat clipper for the new elevator at Mobile, Ala.

The Duluth and Buffalo Grain Co. has been organized with a capital stock of \$120,000 by W. Bassett of Herkimer, N. Y.; E. D. Coe of Oneida, N. Y.; James L. John of Buffalo, N. Y.; Bert L. Samuels of Chicago, and John L. Bert and D. L. Bassett of Duluth. The new company purposes to deal in grain, flour and feed of all kinds, to buy from farmers and sell directly to consumers. Offices will be

opened in Buffalo and elsewhere, about July 1. The officers of the company are as follows: President, E. D. Coe; vice-president, Bert L. Samuels; general manager, John L. Bert; treasurer, D. R. Bassett; secretary and assistant manager, W. Bassett.

A movement is on foot for the erection of a 1,000,000-bushel elevator at Portland, Maine. Local capitalists have subscribed \$175,000 and the Grand Trunk R. R. has given \$75,000. The elevator will be of modern construction and equipment and will have wharf and railroad facilities. It is said that an exporting line of steamers will be maintained.

G. C. Dodd & Co., dealers in grain, feed and flour at Cheboygan, Mich., have commenced the construction of a grain and feed warehouse in the rear of their store at that place. The main building will be 30x150, and a drive shed 25x175 feet. Both buildings will be of frame, covered with iron. The addition was made necessary by increasing business.

Grain dealers in all parts of the country ought to use Davis' Grain Tables in buying grain, they will save time and trouble, and there will be less liability of error in computing the value of grain. The 219 pages of tables in the book enable the buyer to tell at a glance the value of grain weighing 32, 48, 56 or 60 pounds per bushel. It will be sent, together with the "American Elevator and Grain Trade" one year, for \$1.50.

The Smith-Gambrill Shipping Co. has been organized in Baltimore, Md., to do an export trade, chiefly in grain. J. Hume Smith, of Smith, Hammond & Co., and George T. Gambrill, Robert G. Gambrill, John L. Rodgers and Edwin Hewes will comprise the new firm. Mr. Hewes will be the foreign representative of the company. Mr. Smith will have retired from the firm of Smith, Hammond & Co. upon the expiration of the partnership by limitation June 15. All the members of the company are well-known in the shipping trade of Baltimore, having connection with prominent grain and flour concerns. Mr. Rodgers is an ex-president of the Corn and Flour Exchange. The headquarters of the company will be in Baltimore.

On June 1 suit was instituted in the United States Circuit Court at Springfield, Ill., by the Chicago, Burlington & Quincy Railway and R. P. Tansey of that city against the St. Louis United Elevator Company and William E. Burr of St. Louis, trustee for the bondholders, to foreclose the mortgage given by the elevator company and for the appointment of a receiver. The mortgages were made to secure bonds for \$682,000, issued in October, 1889. Plaintiffs own \$100,000 of these bonds. D. R. Francis was appointed receiver, and now has charge of the following elevators: In St. Louis, the Merchants', Central A, Central B, Union Depot; also, the Venice at Venice, Ill.; Union Advance and East St. Louis, East St. Louis, and Valley, at the dyke just south of East St. Louis. The United Elevator Company was organized in 1889, with a capital of \$2,685,000, and a bonded indebtedness of \$1,215,000. In May, 1895, a shortage of wheat was discovered in the stock in the elevators. This amounted to 250,000 bushels of wheat, and entailed a loss of from \$150,000 to \$200,000, the exact figure not being obtainable. In the summer of 1895 it was discovered that a large amount of the corn in stock had heated, and this entailed a further loss of \$125,000. In order to meet these losses and to provide money for operating it was necessary to place a blanket mortgage of \$485,000 on the property.

## BOOK NOTICES.

GAS ENGINES.—Spon & Chamberlain of 12 Cortlandt street, New York City, have published "A Practical Handbook on the Care and Management of Gas Engines," by G. Lieckfeld, C. E. It is a substantially bound book of over a hundred pages, and is sold for \$1. The aim of the author was to produce a practical work including all necessary information required to understand and run gas engines, and we think he has been very successful. There are five chapters devoted to choosing and installing a gas engine, brakes and their use in ascertaining the power of gas engines, attendance on gas engines, general observations and specific examination for defects, dangers and precautionary measures in handling gas engines, and also a chapter on oil engines. Users of gas engines will find this a most useful book.

The fight against the bucket shops continues as energetic as ever, and the Board of Trade seems determined to run them out of Chicago. Cases have now been taken to the Federal Grand Jury, which recently returned indictments against the following firms for using the mails for fraudulent purposes: James G. Hulse & Co., 453-455 Rookery Building; J. F. Wakem & Co., 275 Dearborn street; C. F. Van Winkle & Co., 236 La Salle street; the Hamilton Commission Company, 4 Open Board of Trade, and also operating under the name of the Jefferies Company, 26 Rialto Building.

## Items from Abroad

Indian wheat shipments from April 1 to May 23 were 182,000 quarters (of 480 pounds each), against 321,000 during the same time of the previous season.

President Diaz of Mexico has removed the import duty on corn at Vera Cruz to permit the importation of 600,000 pounds for distribution among the drouth-stricken districts.

William Goodwin of Buenos Ayres, the well-known authority on Argentine, reports that he is more than ever of the opinion that the season's shipment of wheat will amount to nearly 3,000,000 quarters, as originally estimated.

Sweden imported in April 53,000 quarters (of 480 pounds each) of wheat, and 7,000 sacks flour. The net import of the two articles in the nine months ending April was 435,000 quarters, against 715,000 quarters in the corresponding period last season.

Weather conditions in France have been very favorable for wheat, but bad for hay. The London Mark Lane Express says the wheat crop of France this year promises 344,000,000 bushels, sufficient for her own requirements, if not allowing for export.

France in the past nine months has imported 25,000,000 bushels of wheat, of which 14,500,000 bushels have been re-exported as flour. There is an import duty equal to 37 cents a bushel on wheat entering France, but millers get this amount rebated on flour exported.

According to United States Consul Fay at Denia, Spain will import 600,000,000 pounds of wheat. He suggests that as no country is so favorably situated as the United States to supply this demand, this market may be secured by the establishment of direct steamship lines.

Shipments from Russian and Black Sea ports from Aug. 1, 1895, to May 22, compared with those of the same time of the previous season, were: Wheat, 19,180,000, against 16,211,000 quarters (of 480 pounds each); corn, 1,190,000, against 2,738,000 quarters (of 480 pounds each); barley, 8,352,000, against 10,883,000 quarters (of 400 pounds each).

Italy imported for consumption during April 326,000 quarters (of 480 pounds each) of wheat, and in the nine months ending April 2,682,000 quarters, compared with 1,663,000 quarters in the corresponding nine months last season. Italy's import of foreign flour is insignificant, and her exports are chiefly made against wheat imported in bond.

Norway imported from Aug. 1, 1895, to February 29, 540,000 quarters (of 480 pounds each) of rye, against 416,000 quarters in the same time of the previous season; and 283,500 quarters (of 400 pounds each) of barley, against 292,000 quarters in the same time of the previous season. Exports during the same time were 5,980 quarters (of 304 pounds each) of oats, against 6,600 quarters.

A Berlin firm is reported to have established a branch house in Amsterdam to continue the futures business in case the German anti-option bill becomes law. A special bank is also to be founded in Amsterdam to facilitate the business. No doubt one of the first results of the passing of the bill will be the diversion of business to other centers, the firm mentioned above being but the leader.

Argentine shipments from January 1 to May 21 included 1,835,500 quarters (of 480 pounds each) of wheat in 1896, against 3,427,500 quarters during the same time of 1895, and 3,951,000 quarters during the same time of 1894. Shipments of corn during the same time amounted to 1,889,000 quarters, against 86,000 quarters during the same time of 1895, and 3,659,500 quarters during the year 1895.

A new French history of agricultural prices for six centuries states that wheat started in at 25 cents a bushel, advanced to 60 cents in 1375, then dropped to 27 cents in 1500, advancing to \$1.36 a hundred years later, hung around a dollar until 1725 to 1850, when it averaged 75 cents, but then advanced to a dollar at the opening of this century, reaching nearly \$2 in 1867, averaging \$1.07 in 1885, and going up to \$1.40 as the French average for 1891. Since then prices have steadily declined.

Official statistics of imports into France from Aug. 1, 1895, to April 1, compared with the same time of the previous year are as follows: Wheat, 3,117,000, against 3,829,000 quarters; rye, 2,900, against 2,920 quarters; corn, 1,016,000, against 486,000 quarters (all of 480 pounds each); oats, 1,194,500, against 1,970,000 quarters (of 304 pounds each); barley, 665,000, against 933,000 quarters (of 400 pounds each). Comparative exports during the same period were: Wheat, 390,000, against 342,000 quarters; rye, 34,600, against 4,750 quarters; corn, 44,000, against 35,000 quarters; oats, 113,000, against 83,500 quarters; barley, 178,400, against 168,500 quarters.

The first car of new crop wheat was shipped from Bakersfield, Cal., May 21, and reached Stockton May 23.



# CROP REPORTS

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

**MISSOURI.** Riverdale, Christian Co., June 1.—The wheat in this vicinity will yield only about half of an average crop. H. G. GILMORE.

**MISSOURI.** Linneus, Linn Co., June 9.—Harvesting the wheat crop will begin here this week. There is a fair crop of wheat in this county. R. P. WATTS.

**KENTUCKY.** Sherburne, Fleming Co., June 8.—The new crop of wheat will not be very large in yield, but the quality of the grain is expected to be good. GEO. N. GRUBER.

**INDIANA.** Wyatt, St. Joseph Co., June 11.—Wheat looks poor. It was damaged by rust, fly and hail. The yield will be about 10 bushels to the acre. Oats will not be a full crop. Corn looks well. SHEARER & GROSE.

**KENTUCKY.** Augusta, Bracken Co., June 8.—The wheat crop in this vicinity will be very short, not over 25 per cent. of a crop. There is a large acreage of corn, and the growing plant looks very promising at present. J. F. GEBHART.

**NEBRASKA.** Badger, Holt Co., June 8.—The present outlook for small grain in this section of Nebraska has never been better in the past ten years. If nothing destroys the wheat there will be a yield of 30 to 40 bushels per acre. F. L. SANDERS & CO.

**KANSAS.** Woodbine, Dickinson Co., June 11.—All crops in this section, with the exception of wheat, promise an abundant yield. Wheat is damaged somewhat by rust, army worms and chinch bugs, but there will probably be about 60 per cent. of an average yield. SMITH BROS.

**MICHIGAN.** Bay City, Bay Co., May 30.—On account of the low price farmers have been obtaining for their wheat the acreage this year is not up to the average. The high winds have considerably damaged some of the growing crops, but there is not much complaint of rust or Hessian fly. WM. E. JONES.

**KENTUCKY.** Winchester, Clark Co., June 10.—The acreage of wheat in this vicinity this year will not be over 80 per cent. of our usual crop. The yield now promises about 40 per cent. of a crop. Freezing during the winter and drouth last fall and this spring are the causes of our poor prospects. Counties adjacent to ours are no better. GOFF & BUSH.

**IDAHO.** Lewiston, Nez Perces Co., May 29.—The prospects for this year's winter wheat crop are not very good. The wheat is very thin on the ground, but we look for a good quality of grain. A great many farmers are just through seeding spring wheat. There is no wheat to speak of in farmers' hands, and the elevators in this locality are about cleaned out. S. K. NOEL.

**KANSAS.** New Albany, Wilson Co., June 6.—Farmers are harvesting the wheat. The acreage was reduced, but the quality of the grain is good. On May 23 a hailstorm passed over this section, cutting a swath a mile wide and cleaning out wheat and corn fields. In some instances the plant was entirely destroyed, in others it was damaged until fit only for feed. Farmers are replanting the wheat fields to corn. J. R. CLIFT.

**NORTH DAKOTA.** St. Thomas, Pembina Co., June 11.—Between the Red River and the Great Northern R. R. it has been difficult to sow wheat, the ground being too wet, and the acreage of wheat will be one-half of an average. Here and there are small patches of ground dry enough to seed, and as it is too late for wheat, oats and barley are being put in. West of the Great Northern it has been dry enough to sow some wheat. THIEXTON.

**KENTUCKY.**—The Kentucky official crop report for June states that in the central and eastern portion practically no rain fell from April 1 to about May 25, with the result that the average dropped from 74 on May 1 to 57 on June 1 for this section. In many counties crop reported as failure. In western district comprising 22 counties rainfall has been much larger, and condition is 80 per cent. of full crop. Combining two sections average is 61, which is a falling off of 13 points during month of May.

**IOWA.** Woodbine, Harrison Co., June 10.—The acreage of corn is probably 10 per cent. short, caused by excessive rains; the condition is only fair, possibly 10 per cent. below the average. Stock in store in town 150,000 bushels, and there is a great deal in farmers' hands. No corn was moved out to speak of. The acreage of oats is large; the condition is not extra good, growth being too rank; there are none in store, but farmers hold a good deal. The acreage of wheat is the largest ever sown; there is considerable grain in farmers' hands; the growth has been too rapid, and farmers are afraid of rust. Hay is simply immense. Potatoes

are good; everything in the garden line is extra good. If the rains let up so farmers can work we will be all right. McEUE & SON.

**SOUTH DAKOTA.** White, Brookings Co., June 6.—The acreage in wheat is about the same this year as it was last year. The condition of the growing crops is good. There is probably about 10 per cent. of the old stocks in store and in farmers' hands at present. THE FARMERS' CO.

**NORTH DAKOTA.** Nicholson, Sargent Co., June 12.—There is a marked increase in the acreage of some crops in this county as compared with those of last year, viz.: Wheat, 20; oats, 10; barley, 5; rye, 10; flax, 25 per cent. At present conditions are very favorable. There has been plenty of moisture, not to an excessive degree. All kinds of grain, especially wheat and oats, present an unusually healthy appearance. There is not over 5 per cent. of last season's stock in store or in farmers' hands. NORMAN COLE.

**SOUTH DAKOTA.** Yankton, Yankton Co., June 12.—The acreage of spring wheat and corn is estimated at 10 per cent. more than that of 1895. Wheat is in fine condition, though frequent rains and heavy dews are developing some rust, which is causing anxiety. The growth of the wheat plant is advanced and there is a good stand. Corn is good, though the weather has been a little cool for rapid growth. The acreage of oats and barley is, say, 10 per cent. less than that of 1895. Present conditions are good. Flax growing is a discredited industry in this section. Very little has been sown this spring. Stocks in store and in farmers' hands are not large. WILCOX & WILLIAMS.

**INDIANA.** June 4.—The state statistician says the wheat crop shows an alarming falling off from last month, and compared with former years. It is the worst in two decades. The returns are from 784 out of 1,016 townships. Northern section condition 57.9; middle section, 52.3; southern section, 51.4; average for this state 53.8, or 20 per cent. less than a month ago. Oats show 87.7; timothy, 67.3; clover, 59.7. At the best there cannot be over half a crop of wheat. The ravages of rust, Hessian fly and chinch bugs in May were more disastrous than within the memory of farmers. Record on corn not given but it is known to be badly damaged in the last two weeks by cutworms and recent storms.

**MICHIGAN.** Lansing, Mich., June 8.—The Michigan crop report, issued by the Secretary of State, states that the average condition of wheat June 1 was 77 per cent. The average condition in the southern counties is 22 points, and in the state 15 points lower than one month ago. These figures may be taken to represent the average of correspondents' estimates of damage by Hessian fly and rust. In a special report given out May 23 the average damage in the southern counties was estimated at 26 per cent. The recent cool weather and heavy rains have been beneficial, but it is beyond question that the crop is seriously and permanently injured. Whatever the total yield, it would have been much more had the crop not been damaged by Hessian fly and rust. The acreage planted to corn fully equals, and the acreage sowed to oats is from 3 to 5 per cent. less than the acreage in average years. In condition oats are nearly a full average. The average condition of meadows and pastures is, in the southern counties, 79; central, 87, and northern, 94, the average for the state being 83. Clover sown this year is in good condition. The figures for the state are 95.

**GOVERNMENT CROP REPORT.**—The Agricultural Department crop report gives the following acreage of wheat. Percentages of areas harvested last year have been obtained from a greatly enlarged list of correspondents, inquiries being addressed in particular to 15,000 of the principal millers throughout the country, to whose careful comparison of present acreage with that of previous years many corrections of the preliminary estimate of December last are due. There has been some diminution of the winter wheat area owing to the total failure of the crop in some sections, the ground having been plowed up for spring wheat or oats. These returns reduced to acres give for the principal winter wheat states: California, 3,011,000; Kansas, 2,684,000; Ohio, 2,422,000; Indiana, 2,294,000; Illinois, 1,906,000; Missouri, 1,418,000; Pennsylvania, 1,239,000; Michigan, 1,202,000; total, 22,794,000. Spring wheat states: Minnesota, 3,200,000; North Dakota, 2,530,000; South Dakota, 2,463,000; Nebraska, 1,224,000; total, 11,825,000.

From Minnesota the department agent reports a much larger area than in 1895, partly owing to the plowing up of fields of winter wheat and rye, but principally to the fact that farmers increased spring wheat area at the expense of other crops, considering it a better investment than oats, rye or corn.

Since the May report the condition of winter wheat has fallen 4.8 per cent., that of June being 77.9, against 82.7 on May 1. The percentages of the principal states are: Pennsylvania, 70; Kentucky, 65; Ohio, 50; Michigan, 73; Indiana, 70; Illinois, 87; Missouri, 80; Kansas, 85; California, 98.

The condition of spring wheat indicates a prosperous yield that closely approximates a full or normal

crop, the average for the country being 99.9 per cent. The average for the year 1895 was 97.8. The averages for the principal spring wheat states are as follows: Minnesota, 92; Wisconsin, 110; Iowa, 103; Nebraska, 105; South Dakota, 111; North Dakota, 103; Washington, 86; Oregon, 95. The percentage of the combined winter and spring wheat acreage is 101, and the condition of all wheat is 87.6.

The preliminary report places the acreage of oats at 98.9 per cent. of last year's area, and the general condition at 98.8, against 84.3 same date 1895.

The acreage of rye is 96.9 of last year's, the condition of same being 85.2, against 85.7 last June. The acreage of barley is 89.9 per cent. of the area of 1895, and its condition stands at 98 per cent.

From Europe a prevailing lack of rain is reported, with injury to crops generally in Spain, Italy and Great Britain. Hay and pasture are injured in France, but wheat is especially abundant. Prospects are an average in Austria-Hungary, Roumania and Bulgaria, and are exceptionally good in Germany and Russia.

**OHIO.** Columbus, June 4.—The state crop bulletin for June 1 shows that the condition of the growing wheat crop in this state is even worse than was anticipated in the preceding crop bulletins. On May 1 the bulletin showed the condition to be 55 per cent. of a full average. The condition has fallen 6 points, and is now 49. This decline has been furthered by ravages of the Hessian fly, which is reported from nearly every section of the state. The fly was reported last month, but its prevalence was not supposed to be general or its damage great, but during the month it has developed, and its work has been rapid and destructive, as well as quite general. Much wheat that a month ago was reported fair is reported as quite the reverse the present month. Upon getting into the fields and examining the heads the discovery is made that they are not well filled with grain, some not more than half, while samples have been submitted to the department that are totally barren of grain. This condition of the wheat prevails in northern counties, and especially where the best prospects were indicated last month. Many correspondents also reported rust and blight, the latter more than ever known before. Conditions are such that the Ohio wheat crop of 1896 will be considerably less than half an average. The grub and cut worm are reported in the corn to such an extent in some localities as to require replanting. Wheat condition compared with an average, 49 per cent.; barley, 64 per cent.; rye, 66 per cent.; oats, 93 per cent.; clover, 60 per cent.; timothy, 65 per cent.; damage by grubworm 8 per cent.

**KANSAS.** Topeka, June 5.—The State Board of Agriculture's bulletin shows the crop conditions in Kansas as given by correspondents for May 31, as follows: **WINTER WHEAT.**—The extremely high percentage of condition reported April 30 has been maintained in but very few counties, the present average for the entire state being 69. The average, however, in 84 counties containing a small fraction less than 75 per cent. of the total acreage is given as 79.26, while in the 21 counties having the remaining acreage it is 33.45. Twenty-eight counties have an average condition of 97.46, ranging from 90 to 117, and contain 477,776 acres, or 14.35 per cent. of the total acreage. Thirty counties show a condition of 75 to 89 inclusive. The severe decrease in the triangular block of counties southwest of a line extending from Cheyenne to Sumner is due to high winds, unusual heat and lack of timely rainfall which prevailed to a greater or less extent during the first three weeks of May. In the eastern tier of four counties southward from the Kaw Valley the chief harm is a result of too much and too frequent rain, flooding some of the low lands and causing more or less rust and falling down. The late cool, cloudy weather has been against a large development of rust and generally favorable to wheat. Here and there worms, strange to the locality, have caused damage, but no wide-spread harm. The month has been so wholly unfavorable for chinch bugs that they are scarcely mentioned. Harvesting is in progress in the extreme southern counties, and from 10 to 15 days early. **SPRING WHEAT.**—The average condition of spring wheat is 72. **RYE.**—Condition 76. The averages of 100 and above are in Clay, Jewell, Phillips, Marshall, Allen, Gove, Marion, Norton and Washington, respectively. **OATS.**—Condition 83.50. In 9 counties the average range is from 100 to 119, Washington leading with the latter. **CORN.**—The only material drawback to corn prosperity generally as yet is ascribed to too copious rains. These have been so heavy as not only to submerge and drown out plants on the lower bottom lands, but to do much harm by washing, especially on listed ground having any considerable slope, thereby lessening the stand. On extensive areas in the eastern third of the state needed cultivation has been much retarded, and the weeds have made such a lead that vigorous work will be required for their subjection and mellowing the imporous surface soil. In spite of excessive moisture little of the corn shows other than a brilliant green color, and the prospect in the state as a whole is highly favorable. The average condition is 90. Forty counties report average conditions ranging from 90 to 99 inclusive. **POTATOES.**—About the same area is re-



ported in potatoes as one year ago. No unfavorable conditions are mentioned except too much moisture in some of the eastern counties, and the presence of potato bugs in a few isolated fields. **THE SORGHUMS.**—The various sorghums, including Kafir and Jerusalem corn and milo maize, average a condition of 85. **MILLET AND HUNGARIAN.**—The acreage of millet and hungarian is indicated as slightly less than last year. **CASTOR BEANS.**—The area in castor beans is reported as 15 per cent. less than the diminished acreage of one year ago. **BROOM CORN.**—Broom corn shows a more notable decrease in acreage than any other crop—an estimated cut of 60 per cent. from the 134,487 acres of last year. Its condition is 83. **FLAX.**—The decrease in flax acreage amounts to 10 per cent., or 23,000 acres. **BARLEY.**—Barley shows an enlarged acreage in nearly every county where much grown, and the general increase is put at 30 per cent. **GRASSES.**—Reports on conditions of grasses and clovers mostly represent them as excellent, giving luxuriant pasturage and promise of great yields of hay. Much of the alfalfa has made a most vigorous growth and the first crop is in process of harvesting.

## WATERWAYS

The river and harbor bill has become a law, having been passed over the President's veto by large majorities in both houses of Congress.

It is reported that the grain shovellers' strike which was inaugurated at Buffalo June 1 is not affecting the handling of grain at that port to any extent, and that cargoes will continue to be handled promptly.

The barge Arthur, which left Kingston, Ont., May 28, laden with 17,500 bushels of corn, struck a rock and sank in the Galoup Rapids of the River St. Lawrence. The grain, which was insured, was a complete loss.

Grain weigher E. W. Miller of Baltimore, Md., says he is having trouble with consignees and buyers of water-borne grain arriving at that city, because of their neglect or refusal to have the grain officially weighed. He has given notice that he will enforce the law providing a penalty for such cases.

The Corinth Canal is said to have proved a huge disappointment financially. The revenue collected in the second half of last year was about \$30,900, while the working expenses and taxes amounted to \$35,550. This might serve as an object lesson for Nicaragua Canal enthusiasts, if they could be reached by an object-lesson.

A recent report shows the total amount of freight passing through the St. Mary's Falls Canal last season to have been valued at \$159,575,129; the total amount of grain carried amounted to 54,546,944 bushels, flour 8,902,302 barrels. The average cost of carrying wheat was .044 of a cent, other grain .045 of a cent, per bushel, flour .14 of a cent per barrel.

The first fleet of the Cleveland Steel Canalboat Co.'s boats made the following actual running time on its first trip this season: From Cleveland to New York, 9 days and 13 hours; Cleveland to Buffalo, 31 hours; Buffalo to Troy, 5 days, 20 hours; Buffalo to New York, 7 days, 12 hours. It is not expected that the steel boats will carry as much grain this year as it was hoped they would.

It appears that Chicago has managed to scoop Toledo and Detroit out of their long-maintained grain business by lake, said a Buffalo vessel man recently. They used to send us grain by the million bushels before the Chicago fleet could get here, but so far Detroit has sent us nothing and outside of the jags in the line boats, the little schooner Thomas Dobbie has brought us the only load from Toledo.

The bill authorizing the Superintendent of Public Works of New York to allow persons or corporations to keep floating elevators in the waters, basins or canals of the state has become a law. It allows the maintenance of floating elevators at such point as may be considered most convenient for loading or unloading grain, etc. The elevator pool will not be able to make the floating transfer elevators at Buffalo so much trouble this season.

The custom house report for Buffalo shows the heaviest grain movement on record, the total receipts for this season to June 1 being 46,378,000 bushels, against 24,000,000 bushels during the same time last season. The highest previous year shows 33,638,000 bushels. This was in 1892, and only three seasons have exceeded 30,000,000 bushels. The great excess is in wheat and oats, both being well toward three times as much as last season to date.

The House Committee on Interstate and Foreign Commerce recently ordered a favorable report of the Nicaragua Canal bill. It looks as though the advocates of that project were determined to have the government launch itself in the enterprise at any cost. The bill provides a capital stock of \$100,000,000 for the canal company, the United States to subscribe 700,000 shares, \$70,000,000, to the capital

stock of the company, in return for the guarantee of the bonds to be issued by the company. This is a large sum to give to a corporation as a starter.

The complaint of grain shortages at Buffalo is not heard any more, says the Marine Record. The first Chicago fleet had some bad cases which are still under investigation. They all came out of the Armour House, and being about 500 bushels each, it looked as though a draft had been counted that had not been loaded. Tallymen are shy over the matter while the inquiry is going on. Armour A is equipped with automatic recording scale beams but they are not always used.

## PERSONAL

M. C. Greer now has charge of Charles Counselman & Co.'s business at Kansas City, Mo.

Edwin Hewes, of The Smith-Gambrill Co. of Baltimore, has gone to Europe on business for the new firm.

Chas. F. Poehler of Minneapolis, Minn., who is engaged in the grain business with his father, Henry Poehler, was married June 12.

Col. J. D. Blood, the pioneer in the broomcorn business of Amsterdam, N. Y., is called the broomcorn king. He started in on a small scale, and it is said that now he has the largest factory for the manufacture of brooms in the world.

Geo. E. Young, formerly in the commission business at Pittsburg, Pa., and for some time past connected with Everts & Co., commission merchants of Detroit, Mich., is now in charge of that firm's grain and produce commission business at Lansing, Mich.

Frederick Fraley of Philadelphia, Pa., the venerable President of the National Board of Trade, celebrated his ninety-second birthday on May 28. No man is more generally or highly esteemed in commercial circles than Mr. Fraley, who has been President of the National Board of Trade since its organization in 1868. All day friends were calling to congratulate him or sending flowers in honor of the occasion. The Philadelphia Board of Trade sent a handsome bunch of roses tied with red, white and blue ribbons, and his friends of the Chicago Board of Trade sent a magnificent bunch of American Beauty roses.

## RICE IMPORTS AND EXPORTS.

According to the last report of the Bureau of Statistics rice aggregating 115,000 pounds, valued at \$3,974, was imported in April free of duty under reciprocity treaty with Hawaiian Islands, against 242,000 pounds, valued at \$15,190, imported in April, 1895; and during the ten months ending April 4,460,500 pounds, valued at \$156,224, were imported, against 5,054,087 pounds, valued at \$224,330, imported in the corresponding months of 1894-95. In these periods of time no rice imported free of duty was exported.

Dutiable rice amounting to 6,700,564 pounds, valued at \$107,925, was imported in April, against 16,203,342 pounds, valued at \$239,161, imported in April, 1895; and importations during the ten months ending April amounted to 64,441,582 pounds, valued at \$966,071, against 117,292,514 pounds, valued at \$1,848,602, imported in the same time in 1894-95. Of dutiable rice we exported 716,613 pounds, valued at \$11,199, in April, against 1,297,469 pounds, valued at \$20,990, in April, 1895; and during the ten months ending April 11,165,156 pounds, valued at \$166,192, were exported, against 8,322,205 pounds, valued at \$132,270, exported in the same time in 1894-95.

Rice flour, rice meal and broken rice amounting to 6,227,965 pounds, valued at \$83,087, were imported in April, against 8,483,550 pounds valued at \$116,236, imported in April, 1895; and during the ten months ending April 59,591,904 pounds, valued at \$792,992, were imported, against 60,855,476 pounds, valued at \$856,970, imported in the same time of 1894-95. Of imported rice flour, rice meal and broken rice we exported none in April, 1896 or 1895, none in the ten months ending April, and 897 pounds, valued at \$14, in the ten months ending April, 1895.

The J. L. S. Hunt Co., in the grain and hay business at Kansas City, Mo., shipped a train of 30 cars of white corn from there June 9, destined for Mexico. It will enter under the recent order temporarily removing the duty within a limited district.

The Minneapolis Market Record of June 2 says that a careful investigation shows the 25 principal lines of country elevators in the Northwest contain 7,569,000 bushels of wheat, a decrease of 3,923,000 bushels for May. Small elevator lines and independent houses are estimated to contain 1,250,000 bushels, a decrease in them of 600,000 bushels for May. The total supply in all country houses amounts to 8,819,000 bushels, showing a total decrease in country elevator supplies of wheat for May in Minnesota and the two Dakotas of 4,523,000 bushels.

## Late Patents

Issued on May 12, 1896.

Explosive Engine.—George Alderson, Lasalle, Ill., assignor to Chas. Brunner, Peru, Ind. No. 560,016. Serial No. 483,638. Filed Aug. 21, 1893.

Horse Power.—Herman A. Krupke, Paynesville, Minn. No. 560,139. Serial No. 574,226. Filed Jan. 3, 1896.

Vapor Engine.—Albert F. Rober, Ilwaco, Wash. No. 560,149. Serial No. 570,811. Filed Dec. 2, 1895.

Grain Separating Machine.—Friederich H. Shule, Hamburg, Germany. No. 559,815. Serial No. 520,996. Filed Aug. 22, 1894.

Horse Power.—Simon E. Strobel and Wm. C. Cone, De Smet, S. D., assignors of one-third to Nancy M. Patchen, same place. No. 559,914. Serial No. 528,892. Filed Nov. 15, 1894.

Issued on May 19, 1896.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 560,542. Serial No. 570,338. Filed Nov. 29, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 560,543. Serial No. 571,233. Filed Dec. 6, 1895.

Feeding Apparatus for Weighing Machines.—Francis H. Richards, Hartford, Conn. No. 560,544. Serial No. 575,219. Filed Jan. 13, 1896.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 560,545. Serial No. 578,546. Filed Feb. 8, 1896.

Issued on May 26, 1896.

Gas Engine.—Harry L. Parker, Princeton, Ill. No. 560,920. Serial No. 559,283. Filed Aug. 14, 1895.

Issued on June 2, 1896.

Gas and Gasoline Engine.—Louis J. Monahan and John D. Termaat, Oshkosh, Wis. No. 561,123. Serial No. 553,831. Filed June 24, 1895.

Baling Press.—Amos Roop, Francis L. Brandon and John S. Hart, Hicksville, Ohio. No. 561,133. Serial No. 542,416. Filed March 18, 1895.

Automatic Weighing Apparatus.—Gilbert Anderson, Christchurch, New Zealand. No. 561,470. Serial No. 522,478. Filed Sept. 8, 1894. Patented in New Zealand, Sept. 8, 1892, No. 5,760; in Victoria Oct. 6, 1892, No. 1,021; in Queensland Oct. 7, 1892, No. 2,185, and in New South Wales Oct. 8, 1892, No. 4,028.

Baling Press.—John R. Davis and Thos. J. Webb, Leander, Tex. No. 561,496. Serial No. 558,891. Filed Aug. 10, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 561,521. Serial No. 569,627. Filed Nov. 21, 1895.

Weighing Apparatus.—Francis H. Richards, Hartford, Conn. No. 561,522. Serial No. 576,508. Filed Jan. 23, 1896.

Issued on June 9, 1896.

Pea Huller.—John M. Sanders, Dalton, Ga. No. 561,616. Serial No. 577,145. Filed Jan. 28, 1896.

Grain Weigher and Sacker.—Josiah M. Welbourn, Morrow County, Ohio, assignor of one-half to Wm. F. Blayney, same county. No. 561,742. Serial No. 544,763. Filed April 6, 1895.

Gas Engine.—George F. Eggerdinger and George R. Swaine, Cleveland, Ohio. No. 561,774. Serial No. 558,177. Filed Aug. 3, 1895.

Hay Press.—Arthur Gibeault, St. Isidore Junction, Canada, assignor to John Henry Wilson, Montreal, Canada. No. 561,882. Serial No. 579,042. Filed Feb. 12, 1896.

Igniting Device for Gas or Petroleum Engines.—Arthur A. Hamerslag, New York, N. Y. No. 561,886. Serial No. 579,503. Filed Feb. 17, 1896.

Igniting Apparatus for Gas or Explosive Engines.—George E. Hoyt, San Francisco, Cal. No. 561,890. Serial No. 485,688. Filed Sept. 16, 1893.

## TRADEMARKS.

Registered May 12, 1896.

Grass Seed.—The Albert Dickinson Co., Chicago, Ill. No. 28,240. Filed March 27, 1896. Essential feature, a pictorial representation of a landscape comprising a grass plot, a body of water and a building, in connection with the word "Evergreen." Used since Jan. 15, 1896.

The Seedmen's Association held a meeting at Niagara Falls, N. Y., June 11, the following officers being elected: President, F. W. Wood, Richmond, Va.; first vice-president, Alexander Rogers, Chicago; second vice-president, Jerome B. Rice, Cambridge, N. Y.; secretary and treasurer, A. L. Doan, New York; assistant treasurer, M. H. Duryea, New York.



## Fires - Casualties

Whallon's elevator at Virgil, S. D., was demolished by a windstorm June 6.

C. B. Bartlett & Co., grain dealers of Meckling, S. D., recently suffered a loss by fire.

The C. B. & Q. elevator at Davis Junction, Ill., was wrecked in the windstorm May 27.

J. S. Hare & Co., dealers in hay, grain, etc., at San Francisco, Cal., sustained a loss by fire recently.

Abraham Bros., dealers in hay, grain and coal at San Francisco, Cal., recently sustained a loss by fire.

W. H. H. Brownell, grain dealer of Hoosick Falls, N. Y., lost his elevator by fire recently. It was insured.

D. Quail & Son's elevator at Crosswell, Mich., was recently destroyed by fire. The loss is covered by insurance.

Lee Prall's elevator at Atlantic, Iowa, was destroyed by fire on the morning of May 30. Loss \$2,000; insured.

J. P. Cummings, dealer in grain and coal at Sabetha, Kan., sustained a loss through damage by a cyclone recently.

In a general conflagration at Brillion, Wis., May 26, Werner's elevator and warehouse and a quantity of grain were destroyed.

The property of R. M. Stewart, dealer in grain, coal and implements at Reserve, Kan., was recently damaged by a cyclone.

A. S. Cowan & Son, dealers in grain, lumber and implements at Thomas, Mich., recently sustained damage from a cyclone.

The elevator at Jerseyville, Ill., belonging to Richard P. Stroud of Kane was destroyed by fire at 8 a. m. May 25. Loss \$5,000.

The grain warehouse at Talmage, Neb., which belonged to M. McLean of Ogallala, Neb., was wrecked by the wind recently.

A fire at Deseronto, Ont., May 26, burned an elevator, bran house, flour mill, and other buildings, the aggregate loss being over \$350,000.

Wm. Mills' granary at Andover, S. D., containing 2,000 bushels of wheat, was burned at 1 a. m. May 7. The wheat was insured for \$800.

The bottom of one of the bins in J. A. Smith's elevator at Glenboro, Man., caved in recently, allowing about 500 bushels of grain to run through.

The elevator at Catlin, Ind., caught fire recently from sparks from a burning cob pile near by, and was destroyed. It contained but little grain.

The Pacific elevator at Delphi, Minn., caught fire in the cupola at 2:30 p. m. May 27, but it was extinguished before any great damage was done.

The elevator and mill of the Nocona Mill and Elevator Co. at Nocona, Texas, were destroyed by fire recently. The total loss is \$13,000; insurance \$7,000.

Moses Hetherington, grain buyer of Pittwood, Ill., was instantly killed at that place June 9 upon attempting to cross the railroad track between the cars.

William Riddell's elevator at Sparland, Ill., was destroyed by fire at midnight, June 3, together with adjoining cribs and about 30,000 bushels of grain. Partially insured.

C. H. Chase's elevator at South Shore, S. D., was destroyed by fire recently, together with 3,000 bushels of wheat and 1,000 bushels of flax. The building was insured for \$1,000.

Frank Wachholz, who operated elevators at Glencoe and Sumter, Minn., committed suicide May 29. He had become despondent over the death of his wife and business reverses.

Adolph Peterson of Chicago, one of the foremen working on the new elevator at Mobile, Ala., was killed June 5 by falling from the conveyor to the railroad track below, a distance of 50 feet.

Fay & Bell's elevator at Jarbalo, Kan., was destroyed by fire May 31, together with 9,000 bushels of grain. The loss is covered by insurance. It is supposed that lightning struck the elevator.

Wesley Council's elevator at Williamsville, Ill., caught fire at 9 p. m., May 15 from that new cob burner he has constructed near by. The town people turned out and saved the elevator, so the loss was slight.

The W. W. Cargill Co.'s elevator and warehouse at Green Bay, Wis., were destroyed by fire on the night of June 11, together with 120,000 bushels of grain. The buildings were owned by the C. & N. W. R. Co., and were valued at \$30,000. The total loss is estimated at \$85,000, fully covered by

insurance. The origin of the fire is unknown. The Cargill Co. carried on an extensive business at Green Bay and is now without any facilities at that point. It may rebuild.

The Frederick mill and elevator at Frederick, S. D., were destroyed by fire May 25, which was caused by lightning. Four thousand bushels of wheat were burned. The property was partially insured.

Davis & Co.'s elevator at Nevada, Mo., was destroyed by fire June 1, together with several thousand bushels of grain. Loss \$2,500; insurance \$1,500. The fire is supposed to have been of incendiary origin.

Quigg & Tanner's elevator at Minier, Ill., was damaged by fire May 28 to the extent of \$2,500. The elevator was full of oats, which were considerably damaged. The fire was caused by sparks from a passing locomotive.

Two warehouses belonging to G. T. Roots and F. Betts at Hallville, Texas, were destroyed by fire May 26. They contained a large quantity of corn, oats and hay, and no insurance was carried. The origin of the fire is unknown.

The Farmers' Elevator at Treherne, Man., was destroyed by fire on the night of May 22, together with 27,000 bushels of wheat. The building was valued at \$15,000, and was insured for \$10,000. The office and books were also burned.

The elevator at Kent, Minn., belonging to P. L. Howe of Owatonna, was destroyed by fire May 15, together with 5,000 bushels of wheat. Loss \$5,600; insurance \$4,500. The cause of the fire is unknown. The elevator will be rebuilt at once.

Levi Bedell's two storehouses at West Cossackie, N. Y., were struck by lightning and burned May 17. S. P. Hallock & Co. were occupying the houses to store grain, feed and flour, and their loss will be \$4,000. Loss on the buildings about \$2,000.

At 5 a. m. May 17 fire broke out in the King Milling Co.'s elevator at Sarnia, Ont., destroying the elevator, warehouses and flour and oatmeal mills, and the greater portion of a large stock of grain and flour. Loss \$30,000; partially covered by insurance.

The Minnesota and Northern Elevator at Oshabrook, N. D., collapsed recently under the weight of 20,000 bushels of wheat. Rain had washed out the foundation. It is always safer and more economical to have reliable elevator contractors construct a house.

Lockwood, Mott & Co.'s elevator at Crocker, Iowa, partially collapsed recently, caved on both sides, split and let out about 20,000 bushels of oats. About all of the grain was saved. It pays in every case to have an elevator erected by reliable companies who have made a study of the business.

Borgerding & Haskamp's elevator at Melrose, Minn., was damaged by fire May 9. The loss on the building is \$900, no insurance. Five hundred bushels of oats and 3,000 bushels of wheat which were water-soaked were insured. The fire is supposed to have been of incendiary origin.

The Schwartz grain elevator, Altoona, Man., collapsed recently, damaging a large quantity of wheat. Grain men will avoid heavy losses, prevent inconvenience, and reduce expenses by having their houses constructed by builders who have made a study of the strains an elevator is subjected to.

The elevator at Ruthven, Iowa, which belongs to Chas. Counselman & Co. of Chicago, collapsed May 17 under the weight of 30,000 bushels of oats. As most of the oats were recovered the loss was limited to \$1,000. One can never tell what catastrophe to expect of elevators erected by country barn builders.

The Parrish grain warehouses at Brandon, Man., which were occupied by Purden & Smart, were recently damaged by fire. Loss on buildings and grain \$3,000. The charred remains of a 6-year-old boy were found in an outhouse, and it is supposed that he had been playing with fire crackers and thus caused the fire.

Andrew M. Henderson, one of the oldest dealers on the Chicago Board of Trade, committed suicide by shooting himself June 3. It is supposed that recent losses in wheat speculation tended to unbalance his mind. Several years ago Mr. Henderson had the reputation of being the largest seed dealer in the West.

Edward A. Brown, grain and produce dealer of Geneseo, N. Y., was found dead in his warehouse on the morning of May 12 covered with 500 bushels of beans. One side of a large bin under the pickers' room was found to have broken loose, and must have fallen on him. His death was caused by suffocation.

The reported losses on elevator property in St. Louis in the cyclone of May 27 were as follows: Three of the elevators of the United Elevator Co. were unroofed and otherwise damaged, \$18,000; the Central Elevator "B" of \$50,000; the Geo. P. Plant Milling Co., elevator, etc., wrecked, \$5,000; Merchants' Elevator, \$25,000. Other elevators partially

or wholly demolished were: Crescent Grain and Elevator Co.'s, Kehlor's, Flanigan's and others. It is expected that a good deal of the grain will be saved. No estimate of the amount of the damage can be made.

G. W. Van Dusen's elevator at Frankfort, S. D., collapsed June 6. John Yerger, the grain buyer, received fatal injuries. For the sake of avoiding fatalities and the loss of property grain men should have their elevators erected by builders who have a knowledge of the proper construction of elevators.

P. J. Flynn of Waverly, Ill., writes us: The boiler in Rynders & Whitherbee's broomcorn and grain warehouse at this place exploded on the morning of May 18, instantly killing Prince Talkington, who was attending it. Mr. Talkington was a green hand and it is supposed that he let the water get low. He leaves a wife and two children.

Chris Johnson, an employee of the Consolidated Elevator Co. at Duluth, Minn., recently met with an unfortunate accident while in a bin loading wheat to be hoisted out. Johnson's leg became caught in the hoisting rope, and before he could extricate it or the machinery could be stopped, it was crushed and broken. Amputation was necessary.

The elevator at Tower, N. D., owned by the Consolidated Elevator Co. of Duluth, and leased by Andrews & Gage of Minneapolis, was destroyed by fire May 26, together with 4,000 bushels of wheat, valued at \$2,000. Loss on elevator between \$5,000 and \$6,000; fully covered by insurance. It is thought the fire was caused by burning soot in the flues.

The large flouring mills and grain elevators of the Allianza Manufacturing Company at Torreon, Mex., were recently destroyed by fire. The loss is estimated at \$150,000. The mills had recently been equipped with new machinery, and were the largest in Northern Mexico. There was a large stock of grain consumed. The amount of insurance is small.

The Northern Elevator Company's warehouse, an annex of the main building, at Glenboro, Man., recently dropped about four feet off the piles which supported it, spilling 6,000 bushels of grain. Country barn builders try to do something they never learned how to do properly when they attempt to build an elevator. It often results in loss of life and property.

The Northern Elevator Co.'s elevator at Glenboro, N. Y., recently slipped from its foundation and spilled 6,000 bushels of wheat on the ground. Experienced elevator builders who have made a study of the business take measures to prevent accidents which country barn builders neither know nor care anything about, as the expense does not fall upon them.

The Monarch elevator at Red Lake, Minn., fell from its foundation May 12. The damage sustained will not amount to over \$300. The elevator, containing 15,000 bushels of wheat, was standing on posts three feet from the ground, and the wet weather caused them to gradually lean to, until they finally gave way entirely and let the structure down. The smallest as well as the largest elevators built by country barn builders are liable to be short-lived. It pays to consult experienced elevator builders.

H. F. Powell recently forged the name of M. N. Hull, a wealthy grain dealer of Morris, Ill., to a check for \$486.10. He cashed the check, but was arrested soon after.



A DROP IN WHEAT.





Slack Bros. have succeeded O. W. Crabbs, hay dealer at Muncie, Ind.

C. W. Goodlander's barn at Bronson, Kan., burned May 16 with 400 tons of hay.

Atkinson & Zerwekh, dealers in hay, etc., at Seattle, Wash., have dissolved partnership.

Abraham Bros., dealers in hay, etc., at San Francisco, Cal., recently sustained a loss by fire.

M. B. Dunn's hay warehouse at St. Paul, Minn., was destroyed by fire May 30, together with considerable hay.

Minter Bros., commission merchants of Kansas City, Mo., are contemplating the erection of a large hay warehouse.

C. B. Lowry, a well-known hay man of Kansas City, Mo., has purchased and is now controlling the business of the Western Hay Co.

Thomas Murnane's hay shed and barn at Vermillion, Minn., was struck by lightning recently, and 25 tons of hay destroyed. It was insured.

Michael Anglini & Son's hay and feed store at Brooklyn, N. Y., was destroyed by fire June 7, together with considerable hay and feed, causing a loss of \$10,000.

Garrison Bros., commission merchants, Kansas City, Mo., received on May 30 the first car of new hay on that market. It was shipped from Blue Jacket, Ind. Ter.

Jas. A. Stahl's hay barn at Florence, Kan., was struck by lightning May 15 and destroyed. About 500 tons of baled fancy hay were burned. The loss was partially covered by insurance.

John Vosburgh, who was connected with R. P. Lipe in the hay business at Bryan, Ohio, recently went insane and is now confined in an asylum at Toledo, Ohio. He is expected to recover.

It is strange that, with no ration that will take the place of hay, farmers do not display more enterprise in perfecting facilities for insuring a good crop, instead of ranging about for substitutes.

The Scales Commission Co. of Kansas City, Mo., has completed a new office and warehouse at the corner of Nineteenth and Liberty streets, where it is now carrying on business. The new warehouse is of brick, 100x150 feet in size, with a capacity of 200 cars of hay.

Blue grass is not at all peculiar to Kentucky. It grows in Indiana, and even as far North as Northern Wisconsin, where it is called "June grass," on account of its early maturing. It makes good feed, growing abundantly in the spring, but giving out toward the end of July.

The Kaw Feed & Coal Co.'s warehouse at Kansas City, Mo., was damaged by fire on the night of May 23 to the extent of \$1,500, which was covered by insurance. There were about 600 tons of hay in the building, which was damaged to the extent of \$3,000, partially insured.

One of J. A. Brubaker's hay warehouses at Kansas City, Mo., was destroyed by fire May 26, together with 200 tons of timothy hay, valued at \$1,800, partially insured. Loss on building \$1,200, insured for \$800. The cause of the fire was unknown. This is the second fire this firm has suffered recently. Its business has not been interfered with.

There are prospects of a number of new hay warehouses being erected in Kansas City this season. Dealers of that city seem to realize the necessity of hay men having warehouse facilities if they intend to clear a profit these days. Chicago men should keep up with the procession, either compel the railroads to take some action or go ahead and erect their own warehouses.

There is practically a universal belief that the hay grown in certain seasons is richer than that in others. Chemical analysis shows that the proportion of protein varies with the season. In years of abundant growth, which are usually wet and cloudy seasons, hay grows thicker, obtains less sun, generally contains more water at the time of cutting, and in all probability fails to mature as well as in sunny, warm seasons when the sun has more and fuller access to plants. That is to say, in dryer, sunnier years there will be less of the amides that

fail to be organized into protein and less of the carbonaceous materials that reach the highest degree of organization.

The John Mullally Commission Co. of St. Louis received the first car of this season's hay May 14. It came from Blue Jacket, Ind. Ter., and was sold at public auction at \$13.50 per ton. The hay was a scant No. 1 Prairie, but was well cured for such an early date.

The Lyman Ayrault Produce Co. of New York says that since the destruction of the Lehigh Valley Railroad's terminal warehouse at Jersey City the trade in hay has been demoralized by car-door sales, and that there will be further depression of prices this season if the warehouse is not rebuilt. The railroad company is hesitating to rebuild the warehouse, and all shippers are urged to write to the General Freight Agent of the Lehigh Valley Railroad at Bethlehem, Pa., petitioning for the reconstruction of the house.

The old question of overdrafts not being made good is said to be agitating the minds of Kansas City commission merchants. Inasmuch as the commission man cannot always be certain that he is dealing with an honest shipper he ought to protect himself as much as possible. It is proposed that members of the Kansas City Hay Dealers' Association report the names of all shippers who make overdrafts, and that business relations with such shippers and all members cease until the indebtedness is cleared up.

A large three-story corrugated iron warehouse at Louisville, Ky., owned by J. C. Lucas and occupied as a feed warehouse by Eisenman, Shallcross & Co., was destroyed by fire on the evening of May 22, large quantities of hay, straw, grain and bran, with which the building was filled, being burned. The loss on the building will amount to \$2,500, on the contents \$7,500, both fully insured. The fire started in some hay on the second floor, and it is supposed to have been caused by a locomotive spark entering a window which had been left open. Eisenman, Shallcross & Co.'s business was not interrupted, as they have other warehouses.

The Palmer's Dock Hay and Produce Board of Trade was recently organized at Brooklyn, N. Y., with the following officers: John Kerwin, president; Henry Bohannon, Charles Schaefer and W. C. Bloomingdale, vice-presidents; N. H. Clemmishaw, recording secretary; Arthur Clum, corresponding secretary; C. A. Bloomingdale, treasurer. Eight hay companies are at present members of the organization, the purpose of which is to gain the advantage of free interchange of ideas and for the general improvement of the hay trade at Palmer's Dock. To this end every effort will be made to attract hay shippers to that dock by offering them the greatest facilities. It is said that already 50 per cent. of all the freight leaving New York Harbor goes via Palmer's Dock, which is the terminal point of over 20 railroads. The National Hay Association's rules for grading have been adopted.

For many years there has been more or less discussion, pro and con, about the spontaneous combustion of hay produced by its heating after storing. Fires have frequently been caused while hay was going through the heating process within, but disbelievers in the theory of spontaneous combustion have always contended that the cause of these fires was accidental or incendiary, and the ruins were generally in such condition that the true cause could not be determined, therefore the question continued an open one. But now an official report comes from the Pennsylvania Experiment Station that seems to leave no doubt of the possibility of heating hay resulting in fire. In this case the fire was discovered in time to make such examination of the surroundings and conditions as to leave no reasonable doubt about the true cause. The hay was mostly second growth clover, in fine condition when stored, but was dropped from a considerable height—from a power fork—onto about a foot of corn fodder, and it is supposed that solidly compacting the hay by this means was largely responsible for the fire.

In 1888 the Mississippi Experiment Station commenced a series of experiments with grasses and forage plants, and makes the following report: Since the commencement of the work five hundred and eighty-six species have been grown, many of them on soils widely different in character. Sowings have been made at different seasons and under different conditions; seeds of the more promising sorts have been distributed to planters in different parts of the state, and special attention has been given to the fertilizing and winter grazing values of each species. When this work was commenced almost no hay was grown in the state, except what was used by planters for home consumption, and thousands of tons were shipped into the state annually. The census report for 1880 gives the yield of hay in Mississippi as being only .83 ton per acre, against an average yield of 1.14 tons per acre for the whole United States. In 1895 the yield of hay for this state had doubled, being then 1.66 tons per acre, against an average of 1.32 tons for the whole coun-

try. In 1895 the average yield in Mississippi had increased to 1.95 tons, against an average of 1.06 for the whole of the United States or 84 per cent. above the average, and 114 per cent. above the average yield in the northern and central states of the Mississippi Valley. It is sincerely to be hoped that experiment stations of other states will follow the example set by Mississippi.

#### HAY IMPORTS EXCEED EXPORTS.

According to the last report of the Bureau of Statistics hay aggregating 20,359 tons, valued at \$200,682, was imported in April, against 12,538 tons, valued at \$84,087, imported in April, 1895; and during the ten months ending with April 267,173 tons, valued at \$2,420,069, were imported, against 158,906 tons, valued at \$1,136,000, imported during the corresponding period of 1894-95.

Of imported hay we exported none in April, 1896 or 1895, none during the ten months ending April, and 45 tons, valued at \$380, in the ten months ending April, 1895. Of domestic hay we exported 5,120 tons, valued at \$73,766, in April, against 3,382 tons, valued at \$49,274, exported in April, 1895; and during the ten months ending with April 47,980 tons, valued at \$712,854, were exported, against 40,196 tons, valued at \$595,604, exported during the same time of 1894-95.

#### REVIEW OF CHICAGO HAY MARKET.

The prices for hay ruling in the Chicago market during the last four weeks, according to the Trade Bulletin, were as follows:

During the week ending May 16 receipts of hay were 5,795 tons, against 5,487 tons the previous week; shipments for the week were 1,559 tons, against 2,140 tons for the previous week. For strictly Choice Timothy and Upland Prairie there was a moderate demand, and a steady feeling existed. Medium and low grades were extremely dull and receivers experienced considerable difficulty in disposing of consignments. The bulk of the offerings consisted of these off-grades, and the demand was very light. Nearly all classes of buyers wanted only choice hay. Prices ruled weak and declined 25¢ to 50 cents per ton.

During the week ending May 23 receipts were 6,486 tons, shipments 1,677 tons. A rather dull market was experienced. The receipts were heavy and quality only fair, a large portion being coarse and off color. Strictly Choice Timothy and Upland Prairie met with a moderate local inquiry with no particular change in prices. The low grades were very slow sale. Prices irregular and averaged lower.

During the week ending May 29 receipts were 4,774 tons, shipments 1,968 tons. Although the arrivals show a falling off as compared with the previous week the market ruled very dull, especially for timothy hay. The demand was light from all sources, local dealers taking hold sparingly and shippers practically out of the market. Receivers were unable to dispose of consignments as fast as they arrived and there was some accumulation on the tracks. Prices for timothy hay declined \$0.50¢ to 1.00 per ton and prairie hay 25¢ to 50 cents per ton, and the market closed weak at the reduction. Choice Timothy ranged at \$12.00¢ to 13.50; No. 1, \$11.50¢ to 12.50; No. 2, \$10.50¢ to 11.50; not graded, \$8.00¢ to 11.00; Choice Prairie, \$9.00¢ to 10.25; No. 1, \$8.00¢ to 8.50; No. 2, \$7.00¢ to 8.25; No. 3, \$6.00¢ to 6.50. Rye straw sold at \$7.00¢ to 7.75, and oat straw at \$5.00.

During the week ending June 6 receipts were 7,402 tons, shipments 2,545 tons. The market for both timothy and upland prairie hay was in a demoralized condition. The arrivals were very heavy and the market was overstocked. The quality of the offerings was poor, the bulk being coarse and off color, with some heated hay among the receipts. A light inquiry existed for strictly choice, sound hay, but the poorer grades were about unsalable. Prices showed a decline of 20¢ to 50 cents per ton. Sales of Choice Timothy ranged at \$11.75¢ to 13.00; No. 1, \$11.00¢ to 12.00; No. 2, \$9.50¢ to 10.00; No. 3, \$9.00; not graded, \$8.00¢ to 12.00; Choice Prairie, \$9.00¢ to 10.00; No. 1, \$8.00¢ to 8.75; No. 2, 7.00¢ to 8.00; No. 3, \$6.00¢ to 7.50; No. 4, \$5.00¢ to 6.50. Rye straw sold at \$6.50¢ to 7.25, and oat straw at \$5.00¢ to 5.50.

#### OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

Richard Ulrich, Milwaukee, Wis.  
C. O. Bartlett, of C. O. Bartlett & Co., Cleveland, Ohio.  
H. W. Cutler, of The Cutler Co., North Wilbraham, Mass.  
J. Silas Leas, of The Barnard & Leas Mfg. Co., Moline, Ill.

There is war among the grain shovellers of Buffalo. There are two rival unions, one of which struck June 1 for an advance from \$1.80 to \$2.50 per thousand bushels, the other expressing itself as eminently satisfied.



## Court Decisions

### Growing Crop—Mortgage—Lien.

The Supreme Court of Georgia held, in the recent case of Stewart vs. Kramer et al., that where a growing crop was mortgaged to secure advances with which to make the same, and after its maturity was sold under a common law execution against the mortgagor, this execution was entitled to the proceeds of the sale as against an execution issued upon a foreclosure of the mortgage, it appearing that the common law execution had been entered upon the general execution docket before the mortgage was given, and the mortgagee not being a person entitled to a statutory lien upon the crop for such advances.

### Sale of Grain on Credit—Stoppage in Transitu.

The Supreme Court of Iowa holds that a seller of grain on credit, who learns, while it is in transitu, that the buyer is insolvent and intends to get possession with intent to defraud, may rescind the sale. On rescinding the sale, he should give notice to the buyer of his intention to resell. Evidence that he ordered the carrier not to deliver to the consignee, stopped the grain in transit, and sold it as his absolute property, with full knowledge of all the material facts, sufficiently shows an election to rescind the sale. But where he does this, he cannot thereafter claim that by the stoppage he acquired a lien for the price, as against one to whom the bills of lading had been transferred by the buyer as collateral.—Kearney Milling & Elevator Co. vs. Union Pac. Ry. Co., etc., 66 N. W. Reporter, 1059.

### Notice to Insurance Agent Notice to Company.

Insurance companies can only act through agents. There is no reason why such companies should not be affected with notice to the agent. Rhode Island Underwriters' Association vs. Monarch (Ct. App. Ky.), 32 S. W. Reporter, 960. While such companies may try to restrict the power of their agents, and seek to avoid liability for the acts of their agents by inserting conditions in their policies, still they cannot commission an agent to act for them in a given transaction, and then seek to avoid responsibility by denying that notice to the agent is notice to the principal. In such a matter they are charged with notice to the agent in the same way that other principals are in transactions performed through agents. While they may restrict the power of their agents, they cannot escape being charged with notice of such facts which come to the knowledge of the agent while engaged in the authorized transaction.

### Seed Grain Notes.

The Supreme Court of Minnesota recently reversed the decision of the lower court in the case of A. J. Schofield, respondent, vs. the National Elevator Company, appellant. S. owned a seed grain note which was a lien upon certain grain raised from the seed furnished by him and described in the seed grain note. After default in the payment of the note, S. brought suit against E., alleging in his complaint that he was the owner of the grain so raised, and that E. had wrongfully converted the same. The trial court, against the objection of E., permitted S. to introduce in evidence the seed grain note and default in its payment, as sole proof of E.'s ownership therein. Held error, that a seed grain note is not a conditional sale of property therein described; that default in the payment of such a note does not of itself divest the title of the maker of the note to the grain mentioned in the note, and that the admitted proof of ownership of the grain constituted a variance between it and the allegations of ownership set forth in the complaint, and therefore inadmissible under the allegation in the complaint.

### Is a Corn Crib a Building?

The question whether, under the rigid construction that prevails in the Criminal Court, a corn crib is a building was recently raised in the case of the State vs. Gibson, which came before the Supreme Court of Iowa. Larceny under the statute is a crime; with the aggravation of breaking into a building to commit it, it is a greater crime and is visited with severe punishment. The offense was larceny from a corn crib, the indictment being for the higher offense of larceny from a building. The court held that it could not be said, as a matter of law, that the corn crib was a building; that whether or not it was so would depend upon its construction. The court was undecided whether permanency was essential to the structure in order to make it a building. In the case at issue the corn crib was about 150 feet long, 12 or 13 feet wide inside, 11 feet high on one side, and 14 feet on the other, and was made by setting two rows of posts about 13 feet apart, three feet apart in each row, and to these boards were nailed with spaces between those that were three or four feet above the floor. It was roofed over, had no doors or windows, and the only large opening was that made by a board left out of one side about one and a half feet below the roof. The court held the

corn crib in this instance to be a building.—Iowa Homestead.

### Consignment—Bill of Lading—Title.

The Supreme Court of Minnesota held, in the recent case of Freeman et al. vs. Kraemer et al., that where a consignor sold for cash and shipped goods to the consignee, drew drafts on him for the purchase price, and forwarded them with the bills of lading attached to a third party at the place of destination for collection, but the common carrier on the order of the consignee, without the production of the bills of lading, and without payment of the drafts or the purchase price, delivered the goods at the place of destination to the appellants, who in good faith and without notice had purchased them for value from the consignee, no title vested in the appellants, and they were liable to plaintiff in an action of conversion; that in this case the consignor conferred no judicial ownership on the consignee, and that an instrument issued by the common carrier to the consignor, consisting of a receipt for the goods and an agreement to carry them from the place of shipment to the place of destination, is a bill of lading.

## The EXCHANGES

Memberships to the Minneapolis Chamber of Commerce are quoted at \$225.

Tickets of membership to the New York Produce Exchange were recently quoted at \$215.

A ticket of membership in the Chicago Board of Trade recently sold at \$715 net to the buyer.

The St. Louis Merchants' Exchange Building lost its roof in the cyclone of May 27, and trading was demoralized for a short time, but the members soon took an active part in relief work.

Notwithstanding the recent decree of the directors of the Chicago Board of Trade that official weighmen should not weigh grain at junction points, it has been decided to have official weighmen at the Middle Division Elevator at Harvey, Ill., and at the Western Starch Works at Hammond, Ind.

"The Consolidated Produce and Stock Exchange" has been organized at Chicago, and starts out with 283 members, about half of whom are said to be non-residents. The promoters announce that it is "established to fill a place long desired by speculators and traders who have been unable to get accommodations on the larger Exchanges."

The New York Produce Exchange held its annual meeting May 26. The treasurer's report showed that cash sales in commodities dealt in on the floor of the Exchange for the year ending May 1 amounted to nearly \$3,000,000 in excess of the previous year. The gross income for the year was \$301,195.12, expenditures \$238,001.57, indicating a net profit of \$63,193.55. The report of the trustees of the Gratuity Fund shows collections from assessments \$442,308, and payments to beneficiaries \$615,714, of which latter amount \$156,070.40 was paid from Surplus Fund.

The annual election of officers of the New York Produce Exchange took place June 6. There was no opposition to the regular ticket, which named the old officers and managers with one exception, for reelection. The new officers are: President, Henry D. McCord; vice-president, Frank Brainard; treasurer, Edward C. Rice; managers, two years, J. W. Ahles, E. G. Burgess, Emilio Pritchard, C. E. Milmine, Herbert Barber and Joseph S. Thayer; trustees of Gratuity Fund, to serve unexpired term, one year, Vincent Loeser, to serve full term, three years, Elias T. Hopkins.

The directors of the St. Louis Merchants Exchange have taken a stand against grain mixing by public elevators, and have given notice that if continued it shall be deemed sufficient cause for change of classification from regular to irregular. The directors say: "In the opinion of this board the practice of mixing grain in public elevators without the consent of all the parties holding the receipts of such elevators then or thereafter issued for such grain, tends to impair confidence in such receipts and to produce controversies and misunderstandings and to damage the commercial interests of St. Louis."

The directors of the Milwaukee Chamber of Commerce have reduced the charges for supervising weighing of grain from elevators to cars, from 40 cents to 25 cents a car, and from elevators to wagons from 40 cents to 20 cents per 1,000 bushels or part thereof; also the charge for supervising weighing of grain to vessels to 10 cents per 1,000 bushels for 5,000 bushels or over, and 15 cents per 1,000 bushels for less than 5,000 bushels. In connection with the reduction of charges the supervisors adopted a resolution requiring the chief inspector to notify the weighmaster at Buffalo of the exact weight of each cargo shipped, and to request him to notify them of any discrepancy discovered in unloading.

## OBITUARY

Carrollton Holland, grain inspector at Milwaukee, Wis., died June 11, at the age of 81 years.

Benj. T. Underhill, a member of the New York Produce Exchange and jobber in grain, flour, etc., died June 5, aged 67 years.

Andrew Nyman of Duluth, who was for several years grain inspector for the Sawyer Grain Co. and for the Barnum Grain Co., died recently.

Lebanon B. Church of Taunton, Mass., died May 27 at the age of 73. Mr. Church had been for more than half a century the leading grain dealer in that part of the state, and was a prominent man.

Samuel P. Dunn, of the firm of Samuel P. Dunn & Co., grain, flour and feed merchants of New York City, died June 4 of heart failure. Mr. Dunn was an old and esteemed member of the Produce Exchange.

## IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

The total value of breadstuffs imported in April, according to the last report of the Bureau of Statistics, was \$129,821, against \$107,952 for April, 1895; and the valuation of imports during the ten months ending April was \$2,252,318, against \$2,440,638 for the same time in 1894-95.

Barley amounting to 49,471 bushels was imported in April, against 47,883 bushels imported in April, 1895; and during the ten months ending April 758,625 bushels were imported, against 2,027,431 bushels imported in the same time in 1894-95.

Corn amounting to 322 bushels was imported in April, against 826 bushels imported in April, 1895; and during the ten months ending April 3,995 bushels were imported, against 9,320 bushels imported in the same time in 1894-95.

Oats amounting to 3,279 bushels were imported in April, against 1,968 bushels imported in April, 1895; and during the ten months ending April 21,373 bushels were imported, against 306,161 bushels imported in the same time in 1894-95.

Wheat aggregating 6,431 bushels was imported in April, against 174 bushels imported in April, 1895; and during the ten months ending April 1,641,330 bushels were imported, against 1,093,342 bushels imported in the same time in 1894-95.

There was no rye imported in April, 1896, or 1895; and 154 bushels were imported in the ten months ending April, against 12,840 bushels imported in the same time in 1894-95.

Of imported breadstuffs we exported an amount valued at \$26,169 in April, against a valuation of \$5,928 for April, 1895; and for the ten months ending April the valuation was \$1,254,649, against \$104,813 for the same time in 1894-95.

Of imported barley none was exported in April, against 2,458 bushels exported in April, 1895; and during the ten months ending April 8,396 bushels were exported, against 6,197 bushels exported in the same time in 1894-95.

There were no imported oats exported in April, 1896, or 1895; and during the ten months ending April 7,182 bushels were exported, against none in the same time of 1894-95.

Of imported wheat 35,658 bushels were exported in April, against 8,687 bushels exported in April, 1895; and during the ten months ending April 1,893,673 bushels were exported, against 178,504 bushels exported in the same time in 1894-95.



THE CHINCH BUG CHASE.

—From a painting by Zahm.



# PRESS COMMENT

## MANITOBA'S EXPORT GRAIN TRADE.

As regards the Manitoba wheat trade Montrealers are simply not in it, the bulk of the export business being done direct between Winnipeg and New York. During the first three weeks after the opening of navigation, about 2,680,000 bushels of wheat were shipped from Fort William, nine-tenths of which was shipped via Buffalo. The reason of this is that ocean freights are lower in New York, and are available all the time, whereas ocean space at this port is more limited and soon gets filled up on a rush.—Trade Bulletin, Montreal.

## SPECULATION AND PRICES.

Professional speculation has little to do with making prices of wheat. The big traders, whether they are on the "long" side or the "short" side of the market, are successful or unsuccessful, according as they are in line, or out of line, with the great controlling factors of supply and demand the world over. The only time when speculation greatly affects prices is when a great wave of new trading sweeps into the market from all quarters, and that does not happen except when potent influences affecting the actual supply and demand arise.—Kansas City Star.

## THE DIFFERENCE BETWEEN TRADING AND GAMBLING.

The difference between trading on the Board of Trade and in "bucket shops" may be explained concisely as follows: Actual trading on orders in grain, provisions and seeds are made on the Board of Trade—contracts which require the delivery of the property. The prices realized are telegraphed to "bucket shops" and placed on blackboards, and the trading in them is exclusively in the changes telegraphed—not a sale or purchase of actual property being made. The latter business has no more effect on the markets generally than the result of a football game.—Chicago Trade Bulletin.

## THE PRICE OF WHEAT.

The stock of fine spun theories in the Chicago wheat pit are as inexhaustible as some of them are senseless. A dealer up there expresses the idea that wheat declines because of the low price of other agricultural commodities. The price of wheat is based on its exportable value, and that value has been for weeks and is to-day above the parity of Chicago quotations. Chicago has been busy as "the Devil in a gale of wind" selling the market down at home and abroad, when, but for this vicious selling, prices abroad would have been maintained. That is about where the meat in the coconut is located.—Toledo Market Report.

## SPECULATION AND THE DECLINE IN PRICES.

Those foolish persons who allege that speculation in produce is accountable for the decline in prices are likely to have an object lesson before long. In Germany the agrarian party, assisted by a paternal government, have practically succeeded in securing the prohibition of time bargains in grain from the end of the current year, and they have done so with the idea that it would cause a rise in prices. As Russia is reported to be shipping large quantities of wheat to Germany the result will certainly not be what the agrarians expect, and when the producers and merchants are no longer allowed to hedge their positions by forward sales it needs little foresight to predict that the absence of a free market will still further depress the price of grain.—Financial News, London.

## THE JOINT TRAFFIC ASSOCIATION AGREEMENT.

That a contract of the character of the Joint Traffic Association agreement, which has been the subject of the severest denunciation by Senator Stewart and others, and which has been so loudly proclaimed as violative of the act to regulate commerce, should be pronounced as wholly within the terms of the law and entitled to recognition by the courts, is a distinctive gain. The only fear to be apprehended is that if sustained by the supreme court the agreement may be looked upon by legislators as providing so efficient a means for the control of traffic as to obviate any necessity for the repeal of the pooling clause of the interstate commerce law. This would be a serious mistake. Such agreements are only operative at the will of and to the extent that may seem advantageous to the parties thereto. As a matter of fact the efficiency of the Joint Traffic agreement lies in the present disposition of the managers of the roads rather than in the strength of the instrument itself, and the best that can be hoped for it is that it will serve its purpose until the law is so amended as to permit of the substitution of a more effective arrangement.—Railway Review.

## DISCRIMINATION IN FREIGHT CHARGES.

The recent decisions of the Supreme Court of the United States regarding the Interstate Commerce Act, and amendatory statutes, will put the common carrier to the severest tests, should any attempts be made to obtain concessions in freight charges. All shippers are now, in contemplation of law, on an equal footing, as to interstate transportation.

Discrimination is a legal term now in common use to describe the breach of the common carrier's common law or statutory duty to treat all customers alike. It is applied both to unlawful fares and to unlawful freight charges. Discrimination may also be practiced in the facilities allowed to different consignors; such, for example, as the order in which goods are shipped, the opportunities afforded for shipment, the furnishing of necessary cars, and similar matters. This branch of the law is being constantly developed by the enlargement of the circles of commercial distribution, within the states by railroad and warehouse commissions, and between residents of diverse citizenship by the Federal Commission.

Discrimination in freight tariffs means to charge shippers unequal sums for carrying the same quantity of goods equal distances; that is more in proportion for short than for long distances. No conclusive inference is to be drawn either from the carriage at an unequal mileage rate or at an unequal profit per mile. The fact that the higher rate is not unreasonable does not affect the fact of discrimination. To charge one, by means of a rebate, a rate less than the regular fixed tariff rate is not discrimination. Such a contract does not prevent everyone else from obtaining as low, or even lower rates; but to charge one a higher rate than the lowest given to anyone else is discrimination, when it prejudices the one so charged. An agreement not to allow to others a drawback from established rates of transportation, which is allowed to one, is against public policy and void. The law against discrimination cannot be avoided by an agreement to pay full rates in the first instance, and to be repaid by rebates.

The reasonableness of freight charges is a question of fact, and not of law. Under the Interstate Commerce Act, the charges made for the transportation of passengers or property, or the receiving, delivering, loading or unloading of property, must be reasonable, and no discrimination can be made in rates charged or facilities accorded.

At common law the rule is that carriers shall not exercise any unjust discrimination in rates or toll. They are held to do exact and evenhanded justice to everybody doing business with them. Discrimination must consist in allowing one party what is denied another. The common carriers cannot make unreasonable discrimination or give undue preferences between persons applying to them for carriage, either of persons or goods; either in granting carriage to some and not to others; or in carrying for some for less rates than for others. Transportation by them is open to the public upon equal and reasonable terms. The statute as to interstate carriage is simply an enactment of the common law as to all carriers.

A contract relative to freight charges that is not according to the established rates leaves the shipper at the mercy of the company, as it cannot be enforced against it. It is true that the commission has no power to make rates generally, but only to determine whether rates imposed by the railroad companies are in conflict with the statute, that is whether by comparison they are reasonable.

The railroad companies may classify freights and passengers and charge different rates for different classes, if there are reasonable grounds for such distinctions, in the different cost of service, risk or care, or in the accommodations furnished, or the like; but the rates must be the same for all persons and goods of the same class. Charges for freight and passengers must be uniform. Transportation must be open to the entire public upon equal and reasonable terms.

Charles Johnson, who was night watchman in the Calumet elevators at South Chicago in 1892, has brought suit against the owners for \$30,000 for personal injuries received. In June, 1892, Johnson says he fell down a short stairway in Elevator A, and injured his spine. He spent \$500 in doctor bills, and has not recovered. The steps down which he fell were in an unsafe condition at the time, the plaintiff alleges, and the accident was due to the negligence of the defendants.

**HENLEY EVERSOLE,**  
**GRAIN DEALER,**  
**FITHIAN, ILL.**

All Grain Recleaned Before Shipment.

Two hundred bushels of wheat which had been worth \$2.25 per bushel in its time were recently sold at Hudson, Mich., for 68 cents. It had lain in a farmer's granary for 17 years.

**FOR SALE.**

[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

## ROLLED OATS OUTFIT.

A complete rolled oats outfit for sale cheap. Has been in use only three months. Has capacity of 50 barrels per day. Address

SUNDMACHER & STRASSHEIM, 1101 Oakdale Ave., Chicago, Ill.

## FOR SALE—ELEVATOR SCALES.

A contractor has left on his hands one track scale and four hopper scales, suitable for elevator work, new, will sell cheap. Address

CONTRACTOR, care "American Elevator and Grain Trade," Chicago, Ill.

## GAS ENGINE CHEAP.

One good second-hand 35-horse power Raymond Gas Engine for sale. Run only one year; in first-class condition. Correspondence solicited. Address

MCCRAY & MORRISON, Kentland, Ind.

## FOR SALE OR EXCHANGE FOR GRAIN.

Thirty-five feet 16-inch steel conveyor, left hand, new; 35 feet 16-inch steel conveyor, right hand, new; one new separator, capacity 500 bushels per hour, for sale, or will exchange for hay or grain. Address XIX, care "American Elevator and Grain Trade," Chicago, Ill.

## KANSAS STEAM ELEVATOR.

For sale, a 20,000-bushel steam elevator with facilities for making a carload of feed per day; large retail coal houses. Everything complete. In the best grain point in the Republican Valley in Kansas. Address

E. T. ROACH, Salina, Kan.

## SCALES AND SAFE CHEAP.

One set new 4-ton Fairbanks Standard Wagon Scales, cost \$125, never been unboxed, will be sold cheap. Also, one second-hand Herring's Key Lock Fireproof Safe, size 23x32, inside measurement, at a bargain. Address

W. L. KINSMAN, Loda, Ill.

## NEBRASKA ELEVATOR ON EASY TERMS.

Good elevator plant at Arapahoe, Neb., for sale on account of being out of our regular territory. Easy terms. Rins and cribbing facilities for about 80,000 bushels. This elevator controls a large section of country; one other elevator in town. Parties who wish a choice Western location would do well to investigate. Address

E. R. ULRICH & SON, Springfield, Ill.

## IOWA MILLS AND ELEVATORS.

The administrators of the estate of J. J. Wilson, deceased, offer for sale the new Daisy Roller Mills, located at Algona, Iowa, capacity 125 barrels. New throughout one year ago. Steam power, steam heat up to date in every particular. Good exchange business and local trade for mill products. With this plant are elevators of 40,000 bushels' capacity, stock yards, line of coal sheds and three houses for employes. Also the Model Roller Mills located at Emmetsburg, Iowa, capacity 150 barrels. Steam power, steam heat. Large local and shipping trade fully established. No near competition. These properties are located in a good wheat section; shipping facilities from both Algona and Emmetsburg are unsurpassed. To close up the affairs of the estate either one or both of these properties will be sold at a great sacrifice. For particulars address

LENETTE W. BUTLER, administrator, Algona, Iowa.





[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

#### SITUATION WANTED.

Situation wanted as grain buyer or on the road, by an experienced grain man. Address B., care "American Elevator and Grain Trade," Chicago, Ill.

#### ELEVATOR WANTED.

I want to buy or rent for a term of years, a grain elevator in Illinois or Iowa. Give full particulars. Address

A. TOLMAN JR., Bishop Hill, Ill.

#### POSITION AS SUPERINTENDENT WANTED.

Position wanted as superintendent or foreman of grain elevator, either large or small house. Thoroughly understand handling, grading and mixing of grain. Have had ample experience, and can furnish good references. Address

SUPERINTENDENT OR FOREMAN, care "American Elevator and Grain Trade," Chicago, Ill.

#### POSITION WANTED.

I want a situation as foreman or manager in a grain elevator. Have had several years' experience in the handling, grading and mixing of grain and the running of elevator machinery. I understand bookkeeping and all the details pertaining to the business. First-class references. Address

B. J., care "American Elevator and Grain Trade," Chicago, Ill.

#### ELEVATOR FOR RENT.

Elevator in the best grain region of Illinois for rent. The best built and most complete house in this part of the state. Has ear corn and shelled grain dumps, office, scales, hopper scales, one run of French burrs, sheller and cleaner, 30-horse power engine, etc. Must be seen to be appreciated. Possession given June 1, 1896. Elevator located on the C., C. & St. L. R. R. Address

GEO. W. RICHNER, Mansfield, Platt Co., Ill.

#### HAY AND STRAW WANTED.

Sealed proposals, in triplicate, will be received here and at offices of quartermasters at stations named, until 11 o'clock a. m., central time, June 22, 1896, and then opened, for furnishing wood, coal, charcoal, hay and straw, during fiscal year commencing July 1, 1896, at Forts Brady and Wayne, Mich.; Jefferson Barracks, Mo.; Forts Leavenworth and Riley, Kan.; Forts Reno and Sill, Okla.; Fort Sheridan and Chicago, Ill. Proposals for delivery at other points will be entertained. Government reserves right to reject or accept any or all proposals. Information furnished on application here or to quartermasters of stations named. Envelopes containing proposals should be marked "Proposals for Fuel, Hay and Straw," and addressed to undersigned, or quartermasters of stations named.

M. I. LUDINGTON, A. Q. M. G., Chicago, Ill.

### E. R. Ulrich & Son,

SHIPPERS OF

## WESTERN GRAIN,

ESPECIALLY

High Grade White and Yellow Corn.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., C. P. & St. L. Ry., and St. L., C. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building,

SPRINGFIELD, ILLINOIS.

Write for Prices Delivered.

SEND ORDERS FOR

HARD  
SOFT  
BLOCK  
BLACK-  
SMITH

## COAL COKE

TO MILES & COMPANY,

MINE AGENTS AND SHIPPERS.

Best Grades  
Best Prices  
Best Deliveries

PEORIA, ILL.

## COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucket-shop keeper or irresponsible dealer.]

### E. P. MUELLER,

Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Particular attention paid to the shipments of mixed car lots.

860 Calumet Bldg., 189 La Salle St., CHICAGO.

Will pay the highest prices for Wet and Dried Brewers' Grains, Dried Distillers' Slops, Starch Feed, Damaged Wheat, Hominy Feed and Barley Sprouts under yearly contracts  
Write for estimates F. O. B. cars your city.

H. B. SHANES.

Established 1873.

S. H. PHILLIPS.

### Shanks, Phillips & Co.,

COMMISSION MERCHANTS,

HAY, CORN, OATS, BRAN, CHOPS, FLOUR AND CORN MEAL.

306 Front St., Memphis, Tenn.

Refer to Union and Planters' Bank.

Cash advances on B. of L.



## F. H. PEAVEY & CO.,

Minneapolis,

GRAIN RECEIVERS.

Consignments Solicited.

MILLING WHEAT A SPECIALTY.

B. WARREN.

B. WARREN JR.

## WARREN & CO., Grain Commission Merchants,

ROOMS 7 AND 9 CHAMBER OF COMMERCE,

Peoria, Ill.

Established 1868.

## S. W. FLOWER & CO.,

GRAIN AND SEED  
MERCHANTS. . . .

TOLEDO, - - OHIO.

High grades of Clover, Alsike and Timothy Seed a Specialty.

If you want to buy, sell or consign, please correspond with us.

PHILIP BENZ.

EMIL P. BENZ.

### PH. BENZ & CO.,

Grain, Seeds and Hay.

COMMISSION  
MERCHANTS....

Rooms 204 and 205 Omaha Building, Chicago.

REFERENCES: { Bank of Commerce.  
Bradstreet's and Dun's Mercantile Agencies.

## SHIP YOUR GRAIN

—TO—

### P. B. & C. C. MILES,

COMMISSION MERCHANTS,

PEORIA, ILL.

Established 1875.

LIBERAL ADVANCES  
QUICK RETURNS.

REFERENCES:—Commercial Nat. Bank, Peoria Savings, Loan & Trust Co., Peoria.

## COMMISSION CARDS.

J. J. BLACKMAN.

G. W. GARDINER

### J. J. Blackman & Co.,

COMMISSION MERCHANTS,

WHEAT, CORN, OATS, BRAN, MIDDINGS, SCREENINGS, HAY  
SEEDS, BEANS, PEAS AND CORN GOODS.

95 Broad Street, Rooms 604 and 605, - NEW YORK

J. F. ZAHM.

F. W. JAEGER.

F. MAYER

ESTABLISHED 1879.

000

### J. F. ZAHM & CO.,

Grain and Seeds,

TOLEDO, - - - OHIO.

Send for our "RED LETTER." It'll keep you posted.

## Martin D. Stevers & Co.

Commission Merchants,

218 LA SALLE STREET, - CHICAGO.

We make a specialty of selling by sample

Barley, Wheat, Rye, Oats, Corn, Flax and Timothy Seed.

Grain, Seeds and Provisions for future delivery  
bought and sold on margins.

LEMAN BARTLETT.

O. Z. BARTLETT.

### L. Bartlett & Son,

GRAIN AND PRODUCE  
COMMISSION MERCHANTS.

## BARLEY A SPECIALTY.

Room 23 Chamber of Commerce Bldg.  
Milwaukee, Wis.

Careful attention given to orders from Brewers, Maltsters and Millers.

ACCOUNTS OF GRAIN DEALERS

OR ORDERS FOR

## Speculative Investments

On the CHICAGO BOARD OF TRADE SOLICITED.

Call at our office or write for private Cipher Code or Shippers Grain Record.

MCLAIN BROS. & CO.,

RIALTO BUILDING, CHICAGO.

## D. G. Stewart,

GRAIN AND COMMISSION

Proprietor IRON CITY GRAIN ELEVATORS.

Capacity, 300,000 Bushels.

LIBERAL ADVANCES ON ALL CONSIGNMENTS.

CORRESPONDENCE SOLICITED.

OFFICE, 1019 Liberty Street, - PITTSBURGH, PA

ESTABLISHED 1871.

### EDWARD P. MERRILL,

Millers' Agent.

Flour, Grain and Mill Feed.

OFFICE:

21-2 Union Wharf, PORTLAND, MAINE.

No consignments wanted. All sales direct.  
Letters Promptly Answered. I want a good Corn Account.

## COLLINS & Co.,

STRICTLY COMMISSION

Grain, Hay and Mill Feed.

## CINCINNATI, OHIO.



**COMMISSION CARDS.****E. L. ROGERS & CO.,**ESTABLISHED  
1863.**COMMISSION  
MERCHANTS,****GRAIN, Flour, Seed, Hay and Straw.****358 Bourse Building, PHILADELPHIA, PA.**

Liberal advances made on consignments. Market reports furnished gratuitously on application. Correspondence solicited.

References: { **Corn Exchange National Bank.**  
{ **Manufacturers National Bank.**  
{ **Merchants National Bank.****CEO. N. REINHARDT & CO.,****MELROSE STATION, NEW YORK CITY.**

We sell on Commission and buy direct.

**HAY, GRAIN AND FEED.**Storage capacity 8,000 bales, 30,000 bushels.  
Let us know what you have to offer.**COMMISSION CARDS.****S. T. EDWARDS.****E. J. LOOMIS.****F. W. EDWARDS.****S. W. Edwards & Son,**

ESTABLISHED 1870.

**HAY, GRAIN AND FEED,  
COMMISSION MERCHANTS.****Office and Warehouse,  
110-120 N. Elizabeth Street, Chicago.**References: { **Union National Bank, Chicago, and**  
{ **Bradstreet's Mercantile Agency.**

We are members of the Board of Trade and have salesmen at the principal railroad yards.

ESTABLISHED 1879.

**LEDERER BROS.,**  
**GRAIN and SEED**  
**Commission Merchants,**  
**BALTIMORE, - - MD**

We give careful attention to every shipment, are always prepared to make cash advances on consignments. We make a specialty of handling spot goods, which we either sell after arrival or hold if requested. We solicit your trade as we do a strictly commission business. References: Merchants National Bank, Baltimore, Md., and the Commercial Agencies.

**ROOFING AND SIDING.**Write us for Catalogue and low  
Prices on best**STEEL ROOFING, CORRUGATED IRON, Etc.**

We are large Manufacturers of these goods and can save you money.

**SYKES STEEL ROOFING CO.,**  
611 So. Morgan St., Chicago, Ill.,  
and Niles, Ohio.**JAMES A. MILLER & BRO.**

129 and 131 South Clinton Street, CHICAGO.

**Corrugated Iron Roofing and Siding**

Material Only or put on Complete.

Special pains are taken to get out these materials so they can be cheaply put on and make a good job.

**DURABLE—EASILY APPLIED.**

This roofing is manufactured from natural Trinidad asphalt materials, and will not dry up and become brittle under exposure to the weather as coal tar roofings do. Send for free sample of roof 12 years old, with circular and price list to

**WARREN CHEMICAL & MFG. CO.,**  
56 Fulton St., New York, U. S. A.**Gutta Percha Roofing.****Wire Edge. Lock Joint.****For Flour, Grist Mills and Elevators.****VERMIN PROOF.**

Absolutely fireproof paper sheathing—particularly adapted for elevators. Send for illustrated catalogue.

**EMPIRE PAINT & ROOFING CO., 221 N. 4th St., Philadelphia, Pa.****“THE RACINE” DUSTLESS GRAIN SEPARATOR****Embodies More Points of Excellence**Than any other machine offered for similar purposes, and is **Light Running, Large in Capacity, Perfect in Separation** and with **Great Strength and Durability.** These machines have no equal. Adopted and endorsed by many of the largest Mills and Elevators in the country.**MADE IN DIFFERENT SIZES TO MEET DIFFERENT REQUIREMENTS.****THE RACINE HEAVY WAREHOUSE MILL**Is especially adapted for horse power use, is supplied with **Patent Governor Pulleys**, has an even and steady speed, is built extra heavy and bolted throughout. This machine has large capacity and is more durable than any other Warehouse Mill made.

Send for our catalogue and prices before placing your orders.

**IMPROVED GASOLINE ENGINE.****Oil and Steam Engines from 1 to 100 H. P****Elevator Machinery and Supplies,**

Scales, Warehouse Trucks, Elevator Boats, Buckets and Bolts, Pulleys, Shafting, Belting, Grain Spouts, Etc.

**JOHNSON & FIELD COMPANY, - - RACINE, WIS.****PRICE REDUCED 66 PER CENT.****Cawker's American Flour Mill and Elevator Directory.****FORMER PRICE, \$10.00.****PRESENT PRICE, \$3.50.**

We have a limited number of Cawker's American Flour Mill and Elevator Directory for 1895-1896 on hand which we will sell at \$3.50 per copy. They will not last long at this price, so speak quick if you want one. We will furnish a copy of the Directory and a year's subscription to the AMERICAN ELEVATOR AND GRAIN TRADE for \$4.50.

**ADDRESS MITCHELL BROS. CO., 184 AND 186 DEARBORN STREET, CHICAGO, ILL.**

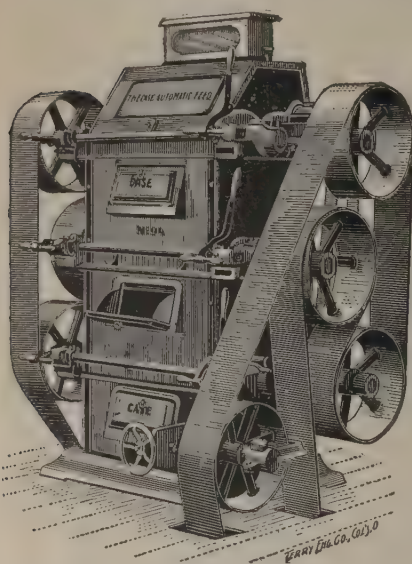


## Elevator Men,

Who put in a **ROLLER FEED MILL** last season, found it a profitable investment. Some Roller Feed Mills put in by elevator men have more than paid for themselves in one season. The demand for ground feed during the coming season promises to be even greater than during the last.

### The Case Three-Pair High Corn and Feed Roller Mills

Are made in four sizes, and always do perfect work.



ONTARIO, IND., April 8, 1895.

The Case Manufacturing Co.,  
Columbus, Ohio.

DEAR SIR:—We have the 9x18 Three-High roll running, and it is the best Feed Roll that I ever handled or saw. We can grind 60 to 65 bushels per hour with less than half the power that we used with the old stone.

She is a daisy. We have smiles all over our faces like a full moon. Now, if you want a statement regarding the roll, let me know, and will write you a good one. Everything all O. K.

Yours respectfully,  
M. S. MILLER.

We Keep a Full Line of  
**ELEVATOR AND MILL SUPPLIES  
AND MACHINERY.**

Grain Cleaners, Corn Shellers, Corn Cleaners and Scourers.

**CORN MEAL BOLTS.**

WRITE US FOR PRICES BEFORE BUYING.

**THE CASE MFG. CO., COLUMBUS, OHIO.**

## THE SMITH PNEUMATIC TRANSFER AND STEEL STORAGE SYSTEM.

*Now in Successful Operation  
at Toledo, Ohio.*

This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

It is fully protected by 20 patents already issued, and others pending, in the United States and principal foreign countries.

It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

The policy of the Company in regard to the introduction of its system is to make such liberal and easy terms with all who desire to use it that there will be no cause for complaint.

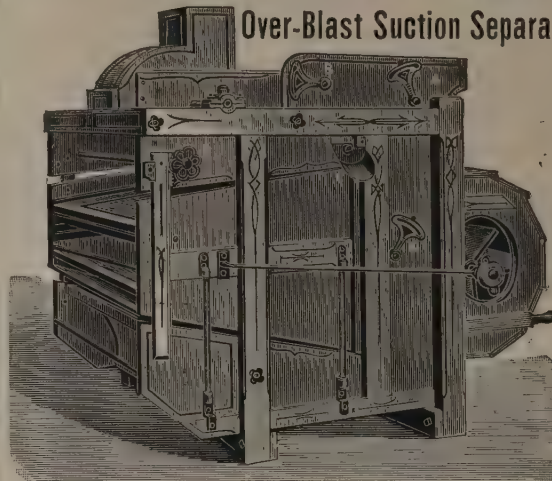
Full particulars furnished on application in person or by letter to

**The Smith Pneumatic Transfer & Storage Co.,**  
1327 Manhattan Building,  
**315 DEARBORN ST., CHICAGO.**

## THE CELEBRATED A. P. DICKEY GIANT GRAIN CLEANERS.

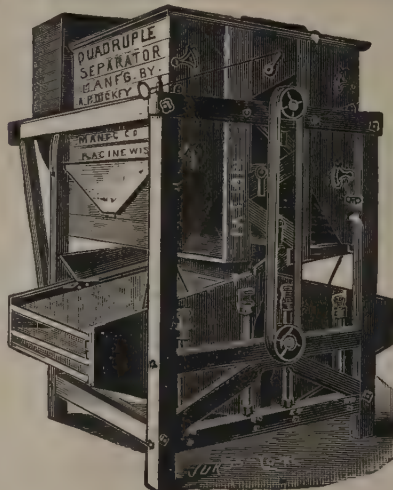
Over-Blast Suction Separator.

**THE  
STANDARD  
IN THEIR  
LINE.**



**"Grain  
Cleaned  
to a  
Standstill."**

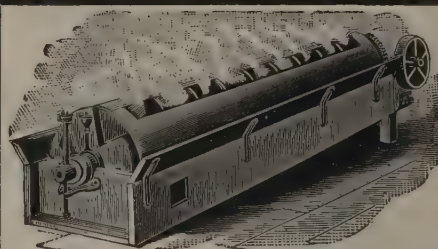
Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over-Blast.



The Quadruple Suction Dustless Separator, Four separate suctions, independent of each other, with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnished with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

For CIRCULARS and PRICES address

**A. P. Dickey Mfg. Co.**  
**RACINE, WIS.**

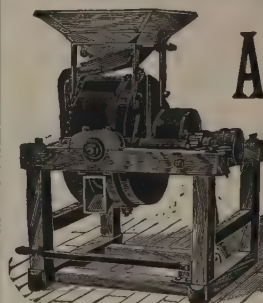


## STEAM DRYER

For Cornmeal, Hominy, Buckwheat, Rice, and all kinds of Cereal Products; also Sand, Coal dust, etc.

Drying Cylinder made entirely of iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

USED AND RECOMMENDED BY LARGEST AND BEST MILLS.



## Automatic Adjustment Mill.

The adjustment is positive and automatic, utilizing every part of the grinding surfaces. Can be started or stopped at pleasure, without stopping the power. Is dressed without taking the shaft out of its boxes, or the belt off the pulley.

**Comprises all Recent Improvements for  
Producing Goods at Lowest Cost.**

SEND FOR CIRCULAR.

**THE CUTLER CO., North Wilbraham, Mass.**

## DUST! DUST!



Gibbs' Patent Dust Protector protects the nose and mouth from inhalations of poisonous dust; invaluable in mills, elevators and every industry where dust is troublesome. Perfect protection with perfect ventilation. Nickel-plated protectors \$1, postpaid. Circulars free. Agents wanted.

Gibbs Respirator Co.,  
30-36 La Salle Street, CHICAGO.



WE SEND

The American Miller AND THE  
American Elevator and Grain Trade

ONE YEAR FOR \$2.50.

Address **Mitchell Bros. Co.,**  
184 Dearborn Street, CHICAGO.





# J. B. DUTTON'S Patent Automatic Grain Scale.

FOR USE IN

ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES. SCALES SENT ON 30 DAYS' TRIAL.  
SEND FOR CIRCULAR AND PRICE LIST.

Address

**J. B. DUTTON, 1026 and 1028 Scotten Ave., DETROIT, MICH.**

## Conveying, Elevating and Power-Transmitting Machinery H. W. CALDWELL & SON CO.

SPECIALTIES FOR MILLS AND GRAIN  
ELEVATORS.

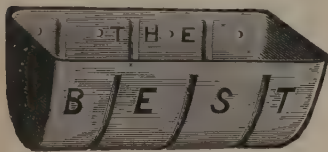
GENERAL MACHINISTS,

127, 129, 131, 133 West Washington St.

CHICAGO.

CALDWELL  
STEEL CONVEYOR.

Manufactured exclusively by us at Chicago, with latest improvements.



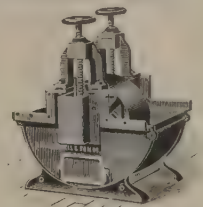
CALDWELL CORRUGATED SEAMLESS  
STEEL ELEVATOR BUCKETS.

LINK BELTING.  
SPROCKET WHEELS.  
COTTON BELTING.  
RUBBER BELTING.  
LEATHER BELTING.  
BELT CLAMPS.  
POWER GRAIN SHOVELS.  
ELEVATOR BOLTS.  
ELEVATOR BUCKETS.  
CONCRETE MIXERS.

FRICTION CLUTCHES.  
JAW CLUTCHES.  
COUPLINGS.  
FLEXIBLE SPOUTS.  
GEARING (all kinds).  
GRAIN SCOOPS.  
ELEVATOR BOOTS.  
COGSWELL MILLS.  
HANGERS.  
PERFORATED METALS.

PILLOW BLOCKS.  
IRON PULLEYS.  
WOOD PULLEYS.  
SHAFTING.  
SET COLLARS.  
SWIVEL SPOUTS.  
TAKE-UP BOXES.  
TURN HEAD SPOUTS.  
WIRE CLOTH.

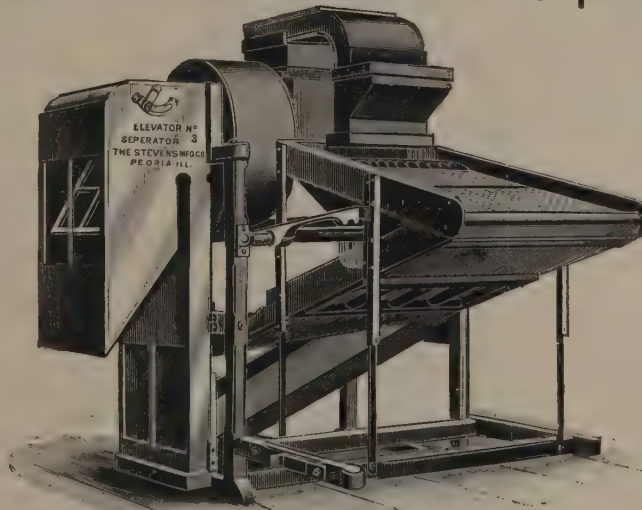
Elevator  
Boot.



## Stevens Dustless Warehouse Separator.

## A GRAIN SPOUT

That will load cars without shoveling.  
It is worth its weight in silver. 16 to 1  
that it will save you in labor all it costs  
in less than a month



This machine is designed for warehouses or elevators of medium capacity. It has every feature to insure perfect work. No grain or chaff can be drawn into the fan and hurled into the dust room or out of doors. By the use of the proper perforated sieves, this machine will clean perfectly wheat, rye, oats, barley, buckwheat and peas.

Built in five sizes. Send for catalogue, description and prices. We sell all our machines under a guaranty. Address

THE STEVENS MILL & ELEVATOR MACHINERY CO., PEORIA, ILL.



Send for Prices to

**H. SANDMEYER & CO.,**

...PEORIA, ILL...

**JEFFREY**

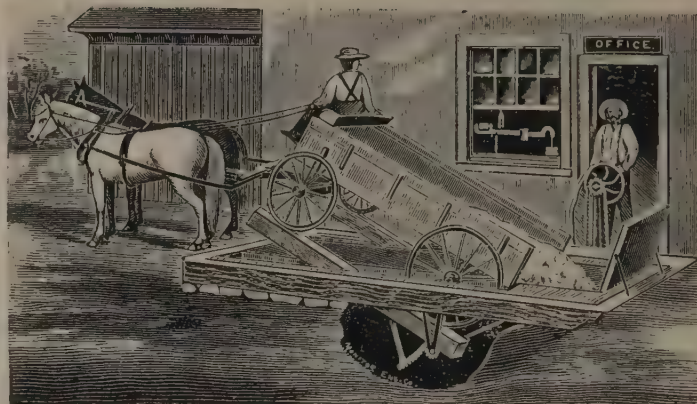
Roller, Steel and Special Chains  
—FOR—  
**ELEVATING  
AND CONVEYING  
MACHINERY**  
FOR HANDLING MATERIAL OF ALL KINDS.  
**POWER TRANSMISSION  
MACHINERY.**  
**COAL MINING MACHINERY.**  
Wire Cable  
Conveyors.  
For long and  
short distance  
conveying.

**THE JEFFREY MFG. CO.** 163 Washington St.  
Columbus, Ohio. NEW YORK.  
Send for Catalogue.





## Gold Dollars



At FIFTY CENTS apiece are CHEAP, but they do not represent a better investment than we offer the "elevator and grain trade" in our

## Controllable Wagon Dump.

WINCHESTER, ILL., February 4, 1896.

MESSRS. SAVAGE & LOVE CO., Rockford, Ill.

GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No scaring horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

Yours truly,  
M. C. WOODWORTH.

MANUFACTURED ONLY BY

## THE SAVAGE & LOVE CO., Rockford, Ill.

FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.

# J. B. ALLFREE MFG. CO.

## INDIANAPOLIS, INDIANA.

BUILDERS OF

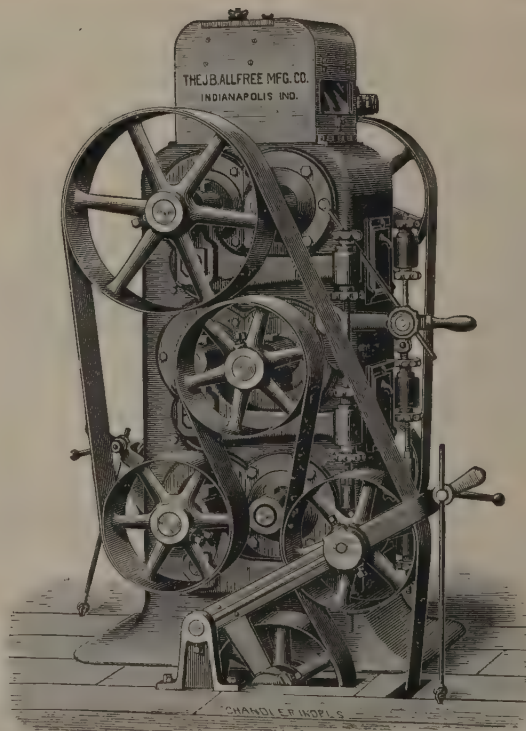
### THE HIGH MILL SYSTEM,

An Improved Milling System,

Makes Better Flour, Saves Power,  
Room and Labor.

Corn Shellers,  
Automatic Engines,  
Cornmeal Plants.

Describe wants and write for  
Circulars.



MANUFACTURERS OF

### FLOUR-MILL and ELEVATOR MACHINERY.

Improved Rope Drives,  
Shafting and Pulleys,  
Corn and Feed Rolls,  
Aspirating Meal Bolts,  
Hominy Separators,  
Grain Separators.

SPECIAL PRICES UPON APPLICATION.



Only \$2

For the

Greatest

Work

Of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

Of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

Of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

Of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

Of the  
kind on

Earth!

Do you Operate an Elevator or Flouring Mill?  
Are you a Grain Buyer or Seller?  
Are you a Grain Commission Merchant?  
Are you a Track Buyer or Seller?

OR, DO YOU DESIRE TO REACH THIS CLASS OF CUSTOMERS?

## ☆ CLARK'S OFFICIAL ☆ Grain Dealers' and Shippers' Gazetteer

WHICH IS NOW READY FOR 1896.

*It is handsomely and durably bound in fine silk cloth, with large side stamp, size 9x12 inches, 280 pages, and will be sent, express charges fully prepaid, for* **Only \$2.00**

This invaluable work has been issued under the endorsement and with co-operation of the Freight Departments of more than one hundred of the leading Railroad Systems throughout the United States. It contains the

### OFFICIAL, CORRECTED, REVISED AND COMPARED LISTS

Of Elevators, Flouring Mills, Grain Dealers and Shippers, Track Buyers and Sellers, Commission Houses, etc., etc., on the Following Leading Systems:

Lake Shore & Michigan Southern Railway.  
Chicago, Rock Island & Pacific Railway.  
Chicago, Milwaukee & St. Paul Railway.  
St. Louis, Iron Mountain & Southern Railway Co.

#### North-Western System:

Chicago & North-Western Railway.  
Chicago, St. Paul, Minneapolis & Omaha Line.  
Fremont, Elkhorn & Missouri Valley Line.  
Sioux City & Pacific Line.

Louisville, New Albany & Chicago Ry. (Monon).  
Chicago, St. Paul, Minneapolis & Omaha Co.  
Chicago & Eastern Illinois.  
Northern Pacific Railway.  
Illinois Central.

#### Burlington System:

Chicago, Burlington & Quincy Railroad.  
Chicago, Burlington & Northern Railroad.  
St. Louis, Keokuk & North-Western Railroad.  
Chicago, Burlington & Kansas City Railway.  
Hannibal & St. Joseph railroad.  
Kansas City, St. Joseph & Council Bluffs Railroad.  
Burlington & Missouri River Railroad in Neb.

Cincinnati, Jackson & Mackinaw.  
Cincinnati, Hamilton & Dayton Railway Co.  
Missouri, Kansas & Texas Railway.

#### Grand Trunk System:

Chicago & Grand Trunk Railway.  
Cincinnati, Saginaw & Mackinaw Railroad.  
Michigan Air Line.  
Chicago, Detroit & Canada Grand Trunk Junc. Ry.  
Detroit, Grand Haven & Milwaukee Railway.  
Toledo, Saginaw & Muskegon Railway.

Boston & Maine Railway.  
Fitchburg Railroad Co.  
Maine Central Railway.  
New York & New England Railroad Co.  
Central Vermont Railroad.  
St. Paul & Duluth Railroad Co.  
The Baltimore & Ohio Southwestern Railway Co.  
New York, Ontario & Western Railway Co.  
Chicago & Alton Railway.  
Minneapolis, St. Paul & Sault Ste. Marie Ry.  
Union Pacific System.  
The Great Northern Railway Co.  
The Missouri Pacific Railway Co.

#### Erie System:

New York, Lake Erie & Western Railroad.  
New York, Pennsylvania & Ohio Railroad.  
Chicago & Erie Railroad.  
Buffalo & Southwestern.  
Tioga Railroad.

And many other leading railroads not enumerated hereon.

#### Pennsylvania System:

Pennsylvania Railroad Co.  
Pittsburgh, Ft. Wayne & Chicago Railway.  
Philadelphia, Wilmington & Baltimore R. R. Co.  
Washington Southern Railway Co.  
Baltimore & Potomac Railroad Co.  
Northern Central Railway Co.  
Camden & Atlantic Railroad Co.  
West Jersey Railroad Co.

#### Panhandle Route:

Pittsburg, Cincinnati, Chicago & St. Louis Ry. Co.  
Indianapolis & Vincennes Railroad Co.  
Cincinnati & Muskingum Valley Railway.

Allegheny Valley Railroad.  
Cumberland Valley Railroad.  
New York, Philadelphia & Norfolk Railroad Co.

Michigan Central R. R.  
C. C. C. & St. L. Railway (Big Four).  
Louisville & Nashville Railroad.  
Nashville, Chattanooga & St. Louis Ry.  
Chicago & West Michigan Railroad.  
Detroit, Lansing & Northern Ry.  
Mobile & Ohio Railway.  
Peoria, Decatur & Evansville Railroad.  
Toledo, Ann Arbor & North Michigan Ry.

The lists for this great work have been collected, arranged and compiled by the above roads and are brought down to date. In the judgment of the leading grain merchants and millers it is the best work of the kind ever published. Besides over 100 of the official railroad lists it contains the Grain Inspection Rules of the leading Boards of Trade, including Minneapolis, Philadelphia, Milwaukee, St. Louis, Detroit, Chicago, Cincinnati, Toledo, etc., etc., the list of officers of the leading Boards of Trade and other information of interest and profit to proprietors of elevators, flour mill owners, grain dealers and shippers, commission houses and track buyers, and concerns who desire to reach this class of customers.

The official lists of the grain dealers, shippers, flouring mills, elevators and commission houses of any one of the twenty-seven of the principal cities is ALONE WORTH MANY TIMES THIS SMALL OUTLAY, and this is the only work which contains these lists, and they are correct and revised to date, besides the thousands and thousands of places all over the country wherever grain is bought or sold.

Remember this great work will be sent immediately on receipt of price, express fully prepaid, provided they have not all been sold, in which case your remittance will be returned immediately.

**SEND YOUR ORDER AT ONCE.**

# MITCHELL BROS. CO.,

184 AND 186 DEARBORN ST., CHICAGO, ILL.

Only \$2

For the

Greatest

Work

of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

of the  
kind on

Earth!

Only \$2

For the

Greatest

Work

of the  
kind on

Earth!



# JAMES STEWART & CO.,

ENGINEERS AND CONTRACTORS FOR

## GRAIN ELEVATORS,

RAILROAD WORK AND HEAVY STRUCTURES,  
ST. LOUIS AND BUFFALO.

CONSTRUCTION DEPARTMENT—WORK IN 1895.

### GRAIN ELEVATORS:

500,000-bushel Elevator, with Marine Leg and Conveyor House 940 feet long, for the New Orleans & Western R. R. Co., Port Chalmette, La.  
200,000-bushel Elevator for the Geo. P. Plant Milling Co., St. Louis, Mo.

500,000-bushel Storage Elevator for the Riverside Malt & Elevator Co., Cincinnati, O.  
150,000-bushel Elevator for the Indiana Distilling Co., Terre Haute, Ind.

### RAILROAD BUILDINGS:

Two Freight Warehouses, each 115 x 625 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.  
Eighty Cotton Warehouses, 62 x 98 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.

Cotton Compress Warehouse, 108 x 310 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.  
Freight Station for the Baltimore & Ohio Southwestern R'y Co., Brighton, Cincinnati, Ohio.

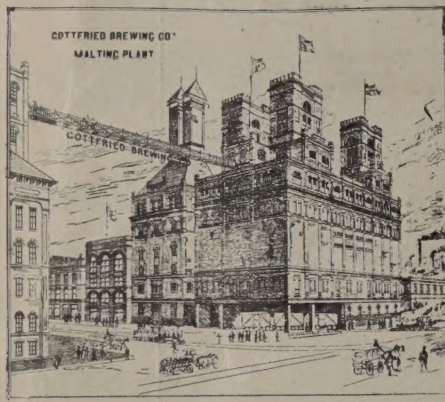
### RIVER AND HARBOR:

Dock and Warehouse, 225 x 1,500 feet for the New Orleans & Western R. R. Co., Port Chalmette, La.

### MISCELLANEOUS:

85,000 Spindle Mill, for the Berkshire Cotton Mfg. Co., North Adams, Mass.  
15,000 Spindle Mill, for the Home Cotton Mills Co., St. Louis, Mo.  
Warehouse for the Bemis Bros. Bag Co., St. Louis, Mo.  
10,000-bushel Distillery, the largest in the world, for the Indiana Distilling Co., Terre Haute, Ind.  
Two Cotton Warehouses, each 200 x 250 feet, for the Pelzer Mfg. Co., Pelzer, S. C.  
Cattle Barns, capacity 2,500 head, for the Indiana Distilling Co., Terre Haute, Ind.

Foundations for the large Train Shed, for the New York Central & Hudson River R. R. Co., at Syracuse, N. Y.  
25,000 Spindle Mill, for the Dwight Mfg. Co., Alabama City, Ala.  
Four-story Bag Factory, for the Gulf Bag Company, New Orleans, La.  
Six-story Office Building, for J. W. Warner, Syracuse, N. Y.  
Sugar Mill, 120 x 650 feet, four stories, for the Gramercy Sugar Mill Co., Gramercy, La.  
U. S. Bonded Warehouse, 110 x 250 feet, for the Indiana Distilling Co., Terre Haute, Ind.  
Hogan Warehouse Building, Syracuse, N. Y.



## WILHELM GRIESSER

ENGINEERING COMPANY . .

Designers and Builders of

Elevators, Breweries, Malt Houses,  
Distilleries and Machinery.

Patentee and maker of the Grain Dryer "America," Direct Supporting Cellar Construction, Steep-Tank and Mash-Tub Valves.

907-911 Schiller Building, Chicago.

## LINK-BELT MACHINERY CO.,

Engineers :- Founders :- Machinists

CHICAGO.



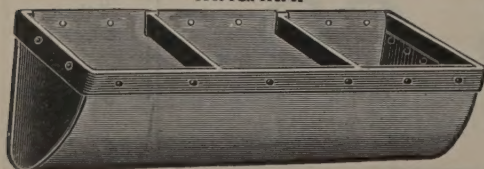
Shafting, Pulleys, Gearing,  
Shaft Bearings, Friction Clutches,  
Rope Sheaves, Manilla Rope,  
Rope Dressing, Grain Trippers,  
Grain Shovels, Car Movers,  
Wagon Dumps, Elevators and Conveyors, etc.

LINK-BELT ENGINEERING CO., Philadelphia and New York.

"CHICAGO."



"NIAGARA."



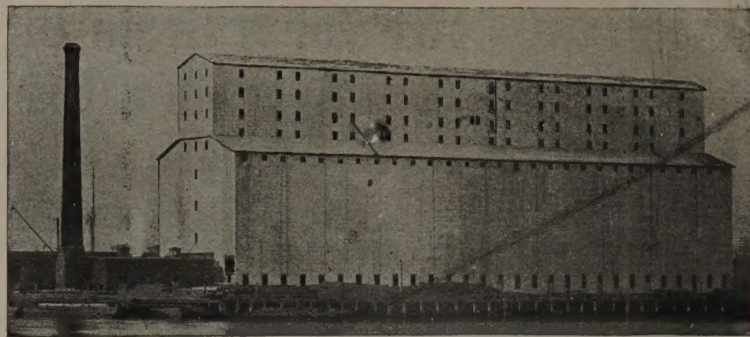
MOORE & LORENZ,  
43 to 49 S. Canal St.,  
CHICAGO, ILL.,

MANUFACTURERS:

ELEVATOR BUCKETS,  
BOLTS, ETC.  
MILL AND ELEVATOR  
SUPPLIES.

## SIMPSON & ROBINSON CO.

71-72 Commerce Building, CHICAGO.



Designers and Builders of

## GRAIN ELEVATORS, MALT HOUSES

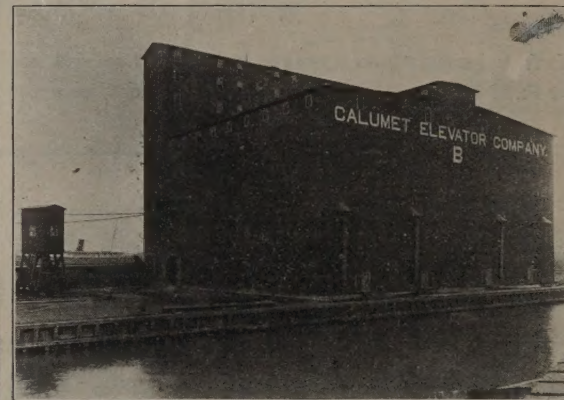
And all Kinds of Heavy Construction.

Patent System of Independent  
Leg Rope Drive.

Patent Double-Jointed  
Distributing Spouts.

Patent Automatic  
Grain Belt Tripper.

## Honstain Bros., ARCHITECTS AND BUILDERS OF . . Grain Elevators.



Estimates furnished on application for Transfer, Mixing and Storage Elevators.

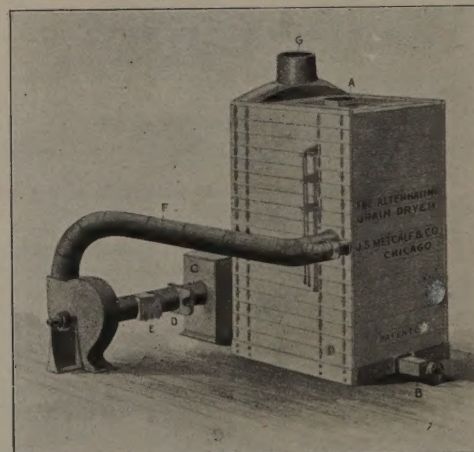
We invite inspection of our designs and solicit correspondence respecting the construction of Grain Elevators. We keep a full line of Mill and Elevator Supplies at . .

313 Third Street South, - Minneapolis, Minn.

## FOUND! FOUND! A PERFECT GRAIN DRYER.

Wet or Damaged Grain Restored to Grade.

Will make you from 10 to 50 per cent. profit.



We guarantee what we claim.

WRITE FOR DESCRIPTIVE CIRCULAR.

## JOHN S. METCALF & CO.,

Engineers,  
Grain Elevator Builders,

1075 WEST 15TH STREET, - - CHICAGO.



# TROMANHAUSER BROS.,

ARCHITECTS, CONTRACTORS, AND BUILDERS OF

## GRAIN ELEVATORS.



COUNTRY,  
TRANSFER,  
MIXING,  
MARINE,  
AND  
TERMINAL  
STORAGE  
ELEVATOR  
PLANTS.

Plans Submitted and Estimates Furnished.  
315 New York Life Building, - - MINNEAPOLIS, MINN.



WHEN YOU WANT  
Elevator or Mill  
Supplies,

Cleaning Machines,  
Feed Mills,  
Corn Shellers,  
Engines and Boilers,  
Horse Powers,

WRITE TO

## GREAT WESTERN MANUFACTURING CO.

General Office and Factory, LEAVENWORTH, KAN.

Warehouse and Salesrooms, 1221-1223 Union Ave., KANSAS CITY, MO.

SEND FOR OUR ILLUSTRATED CATALOGUE.

C. M. SECKNER, PRESIDENT.

J. H. BROWN, SECRETARY.

## The Seckner Contracting Co.,

ARCHITECTS AND BUILDERS OF

## Grain Elevators

AND GENERAL CONTRACTORS,

79-81 DEARBORN ST., CHICAGO, ILL.

1230 and 1233 Unity Building.

Telephone 5035 Main.

## THE B. S. CONSTANT COMPANY,

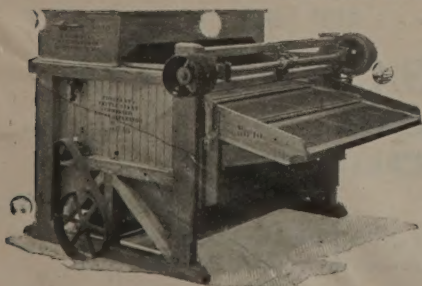
Designer and Builder of

## GRAIN ELEVATORS.

MANUFACTURER OF

Grain Cleaning Machinery  
FOR ELEVATORS AND MILLS.

Seed and Farm Fanning Mills.



Automatic Self-Feeding Ear Corn Elevator Boot and Sheller Feeder.

Our Elevator Cleaner collects all dust at the head of the elevator before the grain reaches the bins. It also removes the loose silk, shucks and snow out of ear corn and conveys it to the dust room.

Correspondence  
Solicited.

S. W. Cor. Douglas and Prairie Sts., Bloomington, Ill.

## Macdonald Engineering Company,

CONTRACTING ENGINEERS,

Builders and Designers of

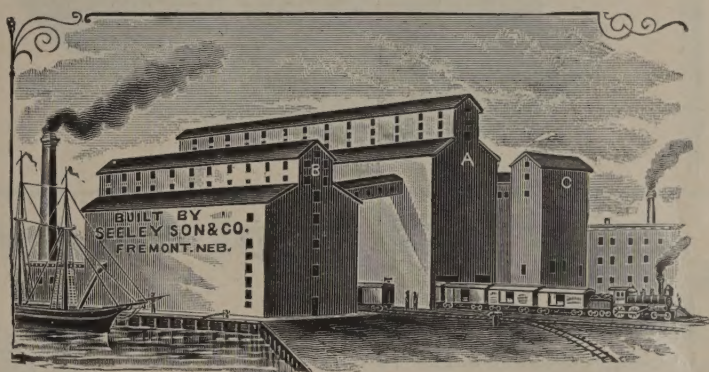
## GRAIN ELEVATORS

Any Capacity.

1454, 1455 and 1456 Monadnock Block, Chicago, Ill.

## SEELEY, SON & CO.,

Fremont, Neb.



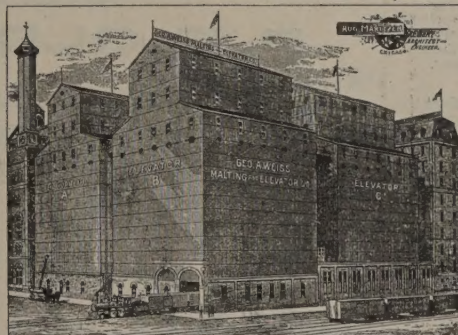
## Architects and Builders

OF ALL KINDS OF

## GRAIN ELEVATORS.

## A. Maritzen Company,

ARCHITECTS, ENGINEERS AND BUILDERS OF



Grain Elevators,  
Breweries,  
Malt Houses and  
Distilleries.

Rooms 42 to 50, 177 La Salle St., Chicago.

## The Heidenreich Construction Co.,

ENGINEERS AND GENERAL CONTRACTORS,

Designers and  
Builders of

## GRAIN ELEVATORS

Of Any Capacity.

MALT HOUSES AND BREWERIES.

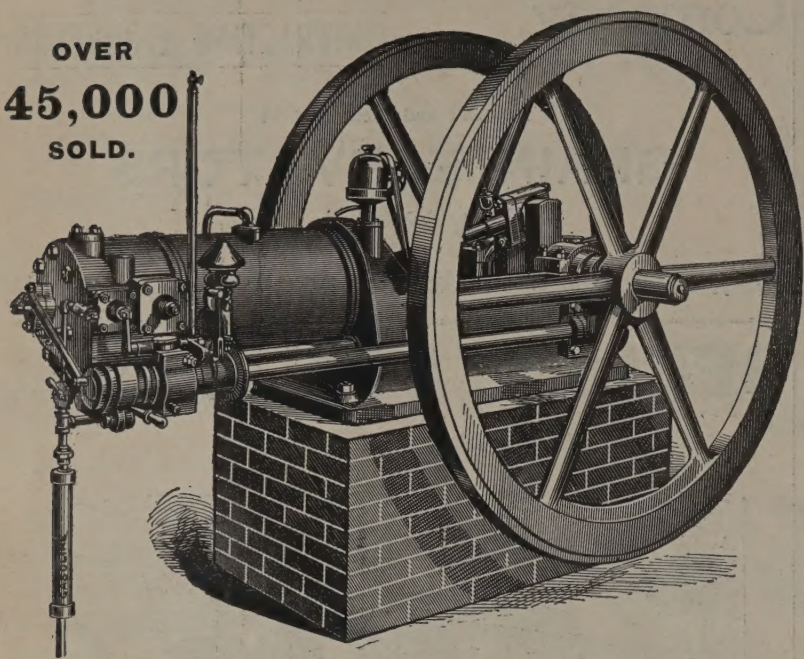
541 The Rookery

Chicago, Ill.



# The Modern Wonder.

OVER  
45,000  
SOLD.



## OTTO GASOLINE ENGINE

WORKING WITHOUT BOILER, STEAM, ENGINEER,  
COAL, ASHES, OR DANGER.

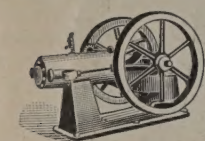
2 Medals and 3 Diplomas at World's Columbian Exposition, making over 200 Medals and Diplomas in all.

Capacity of Works: 800 Engines per Year.  
Sizes: 1 to 250 Horse-Power.

Best and Cheapest Power for GRAIN ELEVATORS,  
FLOUR AND FEED MILLS, CONVEYORS, ETC.

THE OTTO GAS ENGINE WORKS, Inc.,

OFFICES: Thirty-third and Walnut Sts., Philadelphia.  
245 Lake St., Chicago.  
35 E. Ohio St., Indianapolis.  
321 S. 15th St., Omaha.



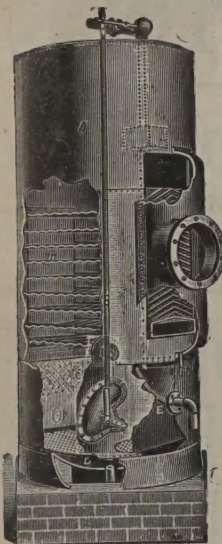
### GASOLINE ENGINES

Are the best and cheapest power for Elevators, Conveyors, Feed Mills, Corn Shellers, Etc.

Catalogue Free.

The Van Duzen Gasoline Engine Co.,  
CINCINNATI, OHIO.

### STILWELL'S PATENT IMPROVED.



Lime Extracting Heater.  
Uses Exhaust Steam.  
Separates the oil from the Steam and Water.  
It regulates the Feed.  
The Pipes Never Pound.  
Prevents Scale in Steam Boilers.  
Removing all Impurities from the Water Before it Enters the Boiler.

THOROUGHLY TESTED.

Over 4,500  
OF THEM  
IN DAILY USE.

Illustrated Catalogue Free.

The Stilwell-Bierce & Smith-Vaile Co.,  
DAYTON, OHIO.

### DUNEBARGER'S

### Hay and Grain Record

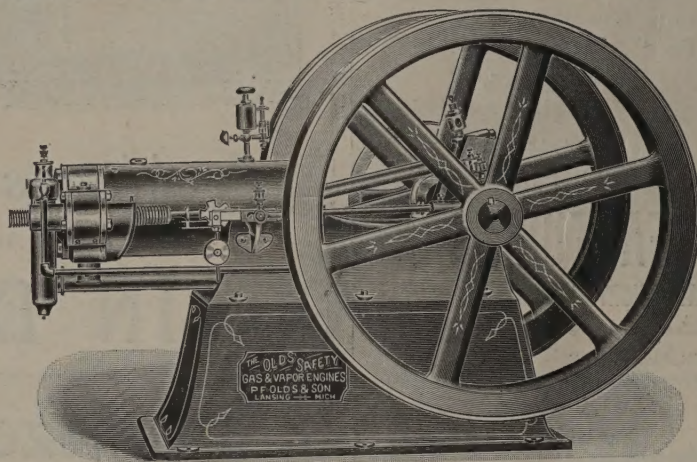
Gives history of each car from date of purchase to final settlement. Profit and Loss quickly seen; arrangement perfect, and a great aid in your business, also checking up accounts. Try it and you will not do without. Every Shipper or Receiver, large or small, wants it. Copyrighted.

Price, \$3.00, Containing 200 Pages.

—ADDRESS—

M. DUNEBARGER, - Fayette, O.

## OLDS' SAFETY VAPOR ENGINES



FREE from cams, gears, rockarms and complications. Greatest simplicity, efficiency, and durability.

P. F. OLDS & SON,

The Gasoline Engine Builders,

Box 423, LANSING, MICH.

## Trucks and Sack Holders.

Improved Trucks,

Combination Truck and Step-Ladder, and Single Trucks, Sack Holders and Stand:

Best Boiler Compound recipe, the right to manufacture and use, with instructions.

Price . . . . . \$1.00

Combination Truck and Step-Ladder and Single Truck for . \$5.00

Prices for larger number given. Write for prices and circulars. Circulars free.

PEARLESS MFG. CO., Springfield, Ohio.

## The Bristol Counter



Registers an accurate account of work done on any machine, grain tallies, fraction tallies, 4, 5 and 6 figures. Send for circular.

C. J. ROOT, Bristol, Conn.

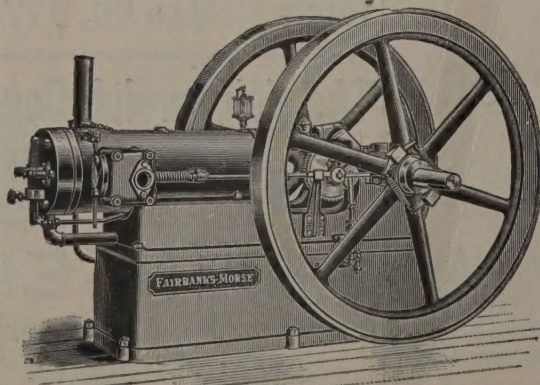
# FAIRBANKS-MORSE Gasoline Engines

--- ARE LIKE ---

FAIRBANKS SCALES,  
Standard,  
Durable,  
Reliable.

Thousands of the Scales and hundreds of the Engines are used by the GRAIN TRADE. . .

FAIRBANKS, MORSE & CO.,  
CHICAGO.



St. Louis. Minneapolis. Cincinnati. Cleveland. Kansas City. Indianapolis. Louisville. Omaha.  
Portland, Ore. St. Paul. Denver. San Francisco. Los Angeles.